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COUNTY BOROUGH OF WIGAN.



THE

ANNUAL REPORT

OF THE

Medical Officer of Health,

FOR THE YEAR 1920.

TOGETHER WITH

The Report of the Tuberculosis Officer.

The Report of the Chief Sanitary Inspector.

The Report of the Veterinary Inspector.

The Report of the School Medical Officer.



WIGAN:

Thos. Wall and Sons Limited, Printers, Rowbottom Square, Wallgate.

1921.

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THIS Report has been prepared in accordance with the instructions of the Local Government Board, as contained in the Sanitary Officers' (outside London) Order, 1910.

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HEALTH COMMITTEE.

From November, 1919, to November, 1920.

Chairman : Alderman M. BENSON, M.D., J.P.

Vice-Chairman : Councillor J. I'ANSON CARTWRIGHT, J.P.

THE MAYOR.

THE EX-MAYOR.

Councillor	W. ATHERTON.	Councillor	J. HENDERSON.
„	GEO. BURBRIDGE.	„	T. HOLLAND, J.P.
„	J. COUNSELL.	„	P. MURPHY.
„	J. FORSTER.	„	F. REES.
„	J. FOSTER.	„	E. YATES, J.P.
„	J. GORMAN.		

Committee meets on Third Thursday in each month at 3-45 p.m.

MATERNITY AND CHILD WELFARE COMMITTEE.

Chairman of Health Committee : Alderman M. BENSON, M.D., J.P. (Chairman).

Vice-Chairman of Health Committee : Councillor J. I'A. CARTWRIGHT.

Chairman Finance Committee : Alderman A. E. BAUCHER.

Alderman	J. O'DONAHUE.	Councillor	T. BROWN.	Councillor	J. HENDERSON.
Councillor	P. MURPHY.	„	G. BURBRIDGE.	„	T. HOLLAND.
„	F. REES.	„	J. COUNSELL.	„	E. YATES.

And a representative from each of the following bodies : Wigan Co-operative Women's Guild, Wigan Infirmary Board of Management, Wigan Board of Guardians (a woman), Wigan Insurance Committee, Wigan Midwives' Guild, and Wigan and District Trades and Labour Council or other recognised Labour Association (a woman).

SANITARY WORKS COMMITTEE.

Chairman : Alderman W. H. ANGUS.

Vice-Chairman : Councillor T. TAYLOR.

THE MAYOR.

THE EX-MAYOR.

Councillor	T. J. ARKWRIGHT, J.P.	Councillor	C. W. HEALY, J.P.
„	G. BURBRIDGE.	„	J. MITCHINSON.
„	M. CARMODY.	„	F. REES.
„	J. FOSTER.	„	J. ROSCOE.
„	R. GORE.	„	W. L. WHITE, J.P.
„	J. H. GREEN.		

Committee meets on Third Monday in each month at 4-30 p.m.

HOSPITALS SUB-COMMITTEE.

Chairman : Alderman M. BENSON, M.D., J.P.

Vice-Chairman : Councillor J. I'ANSON CARTWRIGHT, J.P.

THE MAYOR.

THE EX-MAYOR.

Councillor	J. FOSTER.	Councillor	P. MURPHY.
„	J. GORMAN.	„	E. YATES, J.P.
„	T. HOLLAND, J.P.		

Committee meets Monthly.

HOUSING AND INSANITARY HOUSES COMMITTEE.

Chairman : Councillor E. YATES, J.P.

Vice-Chairman : Councillor J. LOWE.

THE MAYOR.

THE EX-MAYOR.

Alderman	T. ASHTON, J.P.	Councillor	R. GORE.
„	A. BYWATER, J.P.	„	J. GORMAN.
„	E. DICKINSON, J.P.	„	C. W. HEALY, J.P.
„	A. S. HILTON, J.P.	„	T. HOLLAND, J.P.
Councillor	J. I'ANSON CARTWRIGHT, J.P.	„	J. JOLLEY.
„	W. CATTERALL.	„	J. MCCURDY.
„	D. COWSER.	„	R. PRIOR.
„	J. FORSTER.	„	A. SANTUS.
„	J. FOSTER.	„	W. L. WHITE, J.P.

Committee meets on the Second Monday in each Month at 3-30 p.m.

Medical Officer of Health's Department, 1920.



Medical Officer of Health,
Medical Superintendent of Sanatoria,
Superintendent School Medical Officer,
Administrative Tuberculosis Officer:

FRED E. WYNNE, B.A., M.B., Ch.B., D.P.H., &c.

Assistant Tuberculosis Officer,
Assistant School Medical Officer:

A. AZIZ, M.B., Ch.B., D.P.H.

Chief Sanitary Inspector, &c.:

CHARLES H. FRANCE (a) (b) (g) (h).

Sanitary Inspectors:

FRED MARTLEW (b) (c), FRED G. BISHOP, JOHN ASHTON (b)

Assistants:

ERNEST RICHARDSON.

Lady Health Visitors:

A. MORT (d) (e) (g) (j), B. CROMPTON (d) (e), E. RICHARDSON (d) (e) (g),

A. NAYLOR, (b) (d) (g) M. ASH, (from Aug.)

Tuberculosis Nurse:

L. WEST (b).

Clerks:

ARTHUR BYERS, W. J. LOE (Dispensary Clerk), JOHN ROUGHAN,
M. M. WHITTLE.

Steam Disinfector Attendant:

JAMES RISLEY.

Disinfectors:

GEORGE CROSTON, HENRY PARKINSON, JOHN ARROWSMITH,
ARTHUR MACKENZIE.

- (a) Sanitary Inspector's Certificate (Lond.), Royal Sanitary Institute.
- (b) Sanitary Inspector's Certificate (Prov.), Royal Sanitary Institute.
- (c) Meat Inspector's Certificate, Liverpool University.
- (d) Certificate, Central Midwives' Board.
- (e) Health Visitor and School Nurse's Certificate, Royal Sanitary Institute.
- (f) Sanitary Inspector's Certificate, London Examination Board.
- (g) Associate Royal Sanitary Institute.
- (h) Member Sanitary Inspectors' Association.
- (i) Associate Sanitary Inspectors' Association.
- (j) Certificate of Hospital Training.

By order of the Local Government Board, dated March 23rd, 1891, Article 18, Section 14, it is prescribed that the Medical Officer of Health shall

“ prepare an Annual Report, to be made to the end of December in each

“ year, comprising a summary of the action taken during the year for

“ preventing the spread of disease, and an account of the sanitary state

“ of his district generally at the end of the year. The report shall also

“ contain an account of the enquiries which he has made as to conditions

“ injurious to health existing in his district, and of the proceedings in

“ which he has taken part, or advised under the Public Health Act, 1875,

“ so far as such proceedings relate to those conditions; and also on

“ account of the supervision exercised by him or on his advice, for

“ sanitary purposes over places and houses that the Sanitary Authori-

“ ties have power to regulate, with the nature and results of any pro-

“ ceedings which may have been so required and taken in respect of

“ the same during the year. It shall also record the action taken by

“ him or on his advice, during the year, in regard to offensive trades,

“ and to factories and workshops. The report shall also contain

“ tabular statements (on forms to be supplied by the Local Govern-

“ ment Board, or to the like effect) of the sickness and mortality within

“ the district, classified according to diseases, ages, and localities.”

TOWN HALL,

Sheffield,

May, 1921.

To the Chairman and Members of the Health Committee.

Madame and Gentlemen,

I have the honour to present herewith my Annual Report on the Health Conditions of your County Borough during 1920.

As the General Conditions of the Borough, in so far as they affect the Public Health, were fully considered in my last Annual Report, I do not propose to reprint them herewith.

The Statistical Summary shows a material increase in the number of Births as compared with 1919, giving a Birth-rate of 32·69, and an excess of Births over Deaths of 1,344.

The Corrected Death-rate is 15·92, as against 16·13 in 1919, 19·26 in 1918, and an average of 17·16 during the last 10 years. This reduction though satisfactory, as far as it goes, leaves the Death-rate still considerably in excess of that for the 96 great towns.

The continued decline in deaths from Diarrhœa is a very satisfactory feature, as this may be regarded as a definite index of sanitary conditions generally. The same is true of the decline in Enteric Fever, which leads us to hope that this disease will have completely disappeared in future. Of the eight cases admitted to the Whelley Hospital, the diagnosis was not confirmed in several instances. These figures compare with an average of well over 120 cases per annum in the decade prior to the present one. As overcrowding is now probably worse than it ever was, this result can only be attributed to the gradual improvement in sanitary conditions and the habits of the people, more rigid supervision of foodstuffs, and especially of the milk supply, and the early isolation in hospital of almost all the cases that have occurred. The latter is probably the most important factor, and

apart from the saving in human life and suffering, the actual saving in money, represented by the reduction in loss of wages from this cause as compared with the past, is sufficient to justify the whole cost of your hospitals.

The work of conversion of Privies has now been resumed, and a scheme is now in hand which will enable the Corporation to clear off arrears in this respect, and I hope soon complete the abolition of the old system of filth-storage in a short time. When this is done we are entitled to expect a remarkable improvement in our health conditions.

The Infantile Mortality Rate of 124 shows a slight rise as compared with 1919, but this is accounted for by the prevalence of measles during the year. The Infantile Mortality, though very much less than the average of the past, is still far from satisfactory. The principal causes in its production are now premature birth, debility, and wasting during the first few weeks of life, and respiratory diseases. The last of these causes is directly associated with overcrowding, want of ventilation, dampness, and defective housing generally. The two other factors are the result of pre-natal causes of which the chief are, of course, poverty and ignorance among mothers. Venereal Diseases and Alcoholism. These considerations point to the urgent need of developing the work of the pre-natal clinic. This can only be done when adequate premises are provided and equipped, and an Assistant Medical Officer appointed to give the whole of his or her time to this work, under the direction of the Medical Officer of Health. It has been a disappointment that more progress was not made during the year with the alterations to the premises in Library Street, in which your staff is at present temporarily and most inadequately housed.

The close of the year was marked by the sudden death of your Chief Sanitary Inspector (Mr. France). He died as he had lived—at work. For many years, and all through the terrible difficulties created by the war, in spite of most serious physical disabilities, of which he was himself perfectly aware, Mr. France spent himself ungrudgingly in the service of the Department, and in the interests of the town. His early death will long be mourned by all those who had an opportunity of appreciating the value of his services, the nobility of his character, and the charm of his faithful and affectionate personality.

The thanks of the Committee are especially due to Mr. Martlew, for the energy and ability with which he at once took up the duties thus unexpectedly thrown upon him, and to all the Sanitary Staff for another year of unremitting and successful work. The removal of the Offices from King Street West to the present premises in Library Street, was carried out rapidly and efficiently, and I wish to record my appreciation of the way in which all the Staff, including your Lady Health Visitors, have worked without

interruption and without complaint under conditions of very real discomfort and inconvenience.

Miss Crompton and the rest of your Health Visitors have carried on and extended their work with the same ungrudging energy, and to their labours in the homes of the people and in the Clinics is largely due the fact that our Infant Mortality rate has been kept down to its present figure in spite of many adverse circumstances.

The work of the Infectious Diseases Hospitals has again been one of the most satisfactory features of the year, thanks to the admirable and extremely economic management of your Matron, Miss Moss. Councillor Cartwright, the Chairman of the Sanatorium Committee, has taken a keen personal interest in the work and closely supervised the work of re-decoration of the whole of the Administrative Block, and the Wards, and the installation of the new laundry machinery, which is now complete, while the condition of the ground generally, and especially the vegetable gardens, has been improved out of knowledge by your Gardener (Mr. Dawe). The same is true of the Pemberton Hospital. The contentment of the patients there and our entire freedom from disciplinary troubles so common in hospitals for the Tuberculous, are mainly due to the tact and sympathy of Sister McCartan, while the grounds have been maintained in admirable condition by Mr. Ward and Mr. Parkinson.

Dr. Aziz has now almost completed three years of work in Wigan, during which he has been mainly responsible for the efficiency of your Tuberculosis and School Medical Departments. His services to the town have been most valuable, and I join with all who know him in regretting his departure from England.

Dr. Chadwick was appointed School Medical Officer early in the year, and in addition to his very exacting duties in that Department has always been willing to lend his able assistance in the work of the Health Department.

To the Town Clerk, the Borough Analyst (Mr. Melling), the Director of Education, the Borough Engineer, the present Borough Treasurer, and the other chief officials with whom I have been directly concerned in official work, I beg to tender my grateful appreciation for their cordial co-operation in promoting the work of the Health Department.

As this is the last occasion on which I shall have the honour of presenting the Annual Report, I beg especially to thank the Chairman (Alderman Benson), and the Vice-Chairman (Councillor Cartwright), for their continual kindness, sympathy, and support during the whole period of my official connection with your County Borough, and to express to the Committee generally my grateful appreciation of their confidence and courtesy.

I have the honour to be,

Madame and Gentlemen,

Your obedient servant,

FRED E. WYNNE.

PART I.

VITAL STATISTICS.

VITAL STATISTICS.

STATISTICAL SUMMARY FOR 1919 & 1920.

	1920.	1919.
Civil Population estimated July 1st	90,866	83,944
<i>Births</i> —Males 1443 } Total	2,782	2,052
Females 1339 }		
Annual rate of births per 1,000 on Registrar General's estimated population for 1919-20	30.61	22.54
Ditto for England and Wales	25.4	18.5
Illegitimate births 132, or 1.48 per 1,000 of population, a percentage of	4.72	3.99
<i>Deaths</i> —Males 763 } Total	1,447	1,410
Females 684 }		
Corrected death-rate, on Registrar General's estimated population	15.92	16.13
Ditto in England and Wales	12.4	13.8
Death-rate in 96 great towns	12.5	13.8
Excess of registered births over deaths	1,335	642
Total deaths from seven principal Zymotic Diseases..	163	67
*Total deaths from all Zymotic Diseases	190	242
Annual rate of mortality from seven principal Zymotic Diseases	1.79	.78
Total deaths from Diarrhoea	31	30
Infantile-rate (deaths per 1,000 births)	124	117
Ditto for England and Wales	80	89
Ditto for 96 great towns	85	93
Deaths of infants under 1 day old, number.. ..	32	36
" " " 1 year (legitimate).. ..	337	234
" " " 1 year (illegitimate)	9	0

* Including Erysipelas and Influenza.

Acreage.—With an acreage of 5,082, and a civil population estimated at 90,866, we have 17.86 persons per acre.

The Birth-rate and Death-rate are calculated on the figures supplied for these purposes by the Registrar-General, namely, 90,866.

The estimated Population is 90,866.

Births.—The number of births registered during 1920 is 2782 (males 1443, females 1339), the rate per 1,000 of the population being 30.61. The birth-rate compared with 1919 is 8.07 higher. The illegitimate births number 132, or 4.74 per cent.

The Mortality-rate.—The deaths for 1920 number 1,447 (males 763, females 684), being an excess of 79 males over females. The recorded rate per 1,000 of the population per annum is 15.92; in 1919, 16.79; thus on a population of 90,866 we have an increase in deaths of 37 as compared with 1919. There is, therefore, a decrease in the death-rate of .86 per 1,000.

The decrease in the rate in view of the increase in the number of deaths is accounted for by the larger Registrar-General's estimated population.

The death-rate for each quarter is as follows:—

1920	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
All Causes ..	18.18	18.31	12.50	14.70
Zymotics ..	1.98	2.24	1.76	1.18

The Zymotic-rate, 1.79, shows an increase of 1.01 for 1920, in the previous year it was .78.

DEATH RATES, 1920.

Disease.	No. of Deaths.	Rate.
Enteric Fever	3	.03
Small-pox .. .. .	..	..
Measles	104	1.14
Scarlet Fever.. .. .	1	.01
Whooping Cough	8	.08
Diphtheria and Croup	16	.17
Influenza	25	.27
Erysipelas	2	.02
Phthisis (Pulmonary Tuberculosis)	76	.83
Tuberculosis Meningitis	5	.05
Other Tubercular Diseases	13	.14
Cancer, Malignant Disease	83	.91
Rheumatic Fever	1	.01
Meningitis	13	.14
Organic Heart Disease	119	1.30
Bronchitis	184	2.02
Pneumonia (all forms)	157	1.72
Other Diseases of Respiratory Organs .. .. .	..	..
Diarrhoea and Enteritis (under 2 years)	42	.46
Appendicitis and Typhlitis.. .. .	1	.01
Cirrhosis of Liver	2	.02
Alcoholism .. .. .	..	..
Nephritis and Bright's Disease	19	.20
Puerperal Fever .. .. .	..	..
Other Accidents and Diseases of Pregnancy and Parturition	8	.08
Congenital Debility and Malformation (including Premature Birth)	141	1.55
Violent Deaths (excluding Suicides)	46	.50
Suicide	9	.09
Other Defined Diseases	303	3.33
Diseases ill-defined or unknown	66	.72
Total	1,447	15.92

TABLE 1.—WEEKLY RETURNS OF BIRTHS AND DEATHS FOR 1920.

1920. WEEK ENDING.					Deaths from all Causes	Annual Rate per 1000	Deaths from Zymotics	Zymotic- Rate	Births	Annual Rate per 1000
January	3	..	..	..	33	18.94	2	1.14	79	45.36
„	10	..	..	..	40	22.96	4	2.29	78	44.78
„	17	..	..	..	22	12.63	..	..	56	32.15
„	24	..	..	..	23	13.20	..	..	65	37.32
„	31	..	..	..	23	13.20	2	1.14	57	32.73
February	7	..	..	..	21	12.05	..	..	68	29.04
„	14	..	..	..	30	17.22	2	1.14	58	33.30
„	21	..	..	..	24	13.78	6	3.44	58	33.30
„	28	..	..	..	31	17.80	5	2.87	60	34.45
March	6	..	..	..	28	16.07	5	2.87	51	29.28
„	13	..	..	..	31	17.80	4	2.29	39	22.39
„	20	..	..	..	44	25.26	9	5.16	61	35.02
„	27	..	..	..	52	29.74	6	3.44	48	27.56
April	3	..	..	..	41	23.54	7	4.01	46	26.41
„	10	..	..	..	58	33.30	5	2.87	51	29.28
„	17	..	..	..	43	24.68	5	2.87	67	38.47
„	24	..	..	..	36	20.67	7	4.01	41	23.54
May	1	..	..	..	36	20.67	5	2.87	55	31.58
„	8	..	..	..	31	17.80	3	1.72	62	35.16
„	15	..	..	..	37	21.24	5	2.87	60	34.45
„	22	..	..	..	19	10.91	4	2.29	55	31.58
„	29	..	..	..	31	17.80	4	2.29	47	26.98
June	5	..	..	..	17	9.76	1	.57	63	36.17
„	12	..	..	..	19	10.91	..	..	49	28.15
„	19	..	..	..	15	8.61	4	2.29	53	30.43
„	26	..	..	..	25	14.35	1	.57	68	29.04
July	3	..	..	..	24	13.78	4	2.29	47	26.98
„	10	..	..	..	32	18.37	5	2.87	60	34.45
„	17	..	..	..	24	13.78	2	1.14	48	27.56
„	24	..	..	..	18	10.36	2	1.14	54	31.00
„	31	..	..	..	21	12.08	2	1.14	49	28.13
August	7	..	..	..	12	6.89	2	1.14	44	25.26
„	14	..	..	..	21	12.05	3	1.72	56	32.15
„	21	..	..	..	17	9.76	5	2.87	41	23.54
„	28	..	..	..	17	9.76	..	..	50	28.72
September	4	..	..	..	20	11.48	3	1.72	41	23.54
„	11	..	..	..	20	11.48	6	3.44	51	29.28
„	18	..	..	..	23	13.20	4	2.29	52	29.85
„	25	..	..	..	22	12.63	2	1.14	49	28.13
October	2	..	..	..	20	11.48	4	2.29	60	34.45
„	9	..	..	..	29	16.65	8	4.59	48	27.56
„	16	..	..	..	20	11.48	3	1.72	48	27.56
„	23	..	..	..	27	15.50	3	1.72	66	37.89
„	30	..	..	..	23	13.20	1	.57	45	25.83
November	6	..	..	..	26	14.92	2	1.14	43	24.69
„	13	..	..	..	23	13.20	..	..	48	27.56
„	20	..	..	..	16	9.07	1	.57	36	20.67
„	27	..	..	..	24	13.78	..	..	49	28.13
December	4	..	..	..	31	17.80	1	.57	34	19.52
„	11	..	..	..	24	13.78	1	.57	61	35.02
„	18	..	..	..	23	13.20	1	.57	57	32.73
„	25	..	..	..	22	12.63	2	1.14	38	22.92
Transferable					58	..	..	..	..	..

Registrar-General's Estimated Population, 1920 :—90,866.

TABLE II.

MONTHLY LIST OF DEATHS FROM ALL CAUSES AND ZYMOTIC DISEASES WITH RATES PER 1,000
PER ANNUM FOR 1919 AND 1920.

Four Weeks Ending.	No. of Deaths from All Causes.		Annual Rate per 1,000 living.		No. of Deaths from Zymotic Diseases.		Annual Rate per 1,000 living.		Deaths of		
									Infants under 1 year.		Persons over 60 years.
	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1919
January 24th ..	118	124	16.93	19.94	4	5	.57	.77	16	23	33
February 21st ..	98	264	14.06	41.68	10	2	1.43	.30	20	39	64
March 20th ..	134	145	19.23	22.56	23	2	3.29	.30	23	17	39
April 17th ..	194	105	27.80	16.21	25	2	3.57	.30	48	7	32
May 15th ..	140	91	20.09	14.45	20	1	2.86	.15	33	13	28
June 12th ..	86	78	12.34	12.12	9	5	1.28	.77	19	13	28
July 10th ..	96	81	13.77	12.58	14	2	2.00	.30	22	17	34
August 7th ..	75	58	10.77	9.00	8	4	1.14	.61	20	10	19
September 4th ..	75	68	10.76	10.54	11	15	1.57	2.32	28	21	18
October 2nd ..	85	79	12.19	12.08	16	12	2.28	1.85	25	27	16
October 30th ..	99	82	14.78	12.68	15	7	2.14	1.08	35	14	29
November 27th..	89	105	12.74	16.21	3	6	.42	.92	27	26	27
December 25th ..	100	76	14.35	11.71	5	2	.71	.30	30	12	27
Transferable	58	54	..	..	..	2	..	..	..	2	7
TOTALS ..	1447	1410	15.92	16.79	163	67	1.79	.78	346	241	401

TABLE III.

COMPARATIVE STATISTICS OF WIGAN AND OTHER TOWNS.

TOWN.	Population.	Birth-rate.	Death-rate.	Zymotic-rate.	Infantile death-rate per 1,000 births.	Pneumonia death-rate.	Other respiratory death-rate.	Phthisis death-rate.	Deaths from other forms of Tuberculosis.	Figures as to Venereal Diseases.
Accrington ..	45,398	19.1	13.3	.48	96	.88	.06	.61	.19	4 deaths from Syphilis. 698 patients attended centre.
Barrow-in-Fur.	76,561	25.7	11.3	0.47	78.2	.97	1.46	.75	.24	
Birkenhead ..	152,345	27.66	13.35	1.03	99.81	1.51	1.81	.76	.36	
Bootle ..	80,029	28.6	14.2	1.52	97	1.99	1.35	1.17	.42	
Bradford ..	293,979	20.52	13.31	.41	93	.96	1.40	.88	.19	179 fresh cases. 279 cases dealt with. 16 deaths from Syphilis.
Burnley ..	105,030	23.9	14.16	.65	129	.69	2.21	.72	.35	
Burton-on-Trent	49,582	26.24	11.77	.46	68	.42	1.07	.92	.44	
Chorley ..	32,853	24.1	12.2	1.12	124	1.03	.76	.66	.09	
Carlisle ..	53,095	24.7	12.3	.35	80	.9	1.2	.6	.3	
Crewe ..	47,458	21.7	11.7	.40	88	.48	.13	.77	.31	
Dewsbury ..	55,080	23.07	14.23	—	110.1	.36	1.15	.67	.25	
Halifax ..	106,029	18.9	13.3	.25	96	1.35	1.55	.72	.15	
Huddersfield ..	116,776	18.01	13.37	.35	80	1.14	1.66	.71	.37	
Hull ..	290,808	29.1	13.2	1.04	98	1.21	1.57	.89	.34	
Lancaster ..	40,000	24.42	11.87	.2	76.5	.42	1.42	.8	.32	
Rotherham ..	72,800	27.77	11.45	.47	100	1.33	1.12	.68	.11	
Southport ..	70,000	17.26	13.50	.20	54	.71	.17	.63	.11	
South Shields	115,945	34.2	17.2	.90	121	1.98	2.31	1.34	.41	1,925 patients treated. Venereal Dispensary is at Prince of Wales' General Hospital, Tottenham. 294 new cases.
Stalybridge ..	27,099	21.15	14.06	.7	117	1.29	2.0	.8	.11	
Stockport ..	130,635	22.20	12.87	.89	97.2	1.12	1.64	.94	.24	
Stockton-on-Te.	63,114	32.65	15.60	1.61	110.6	1.98	1.66	1.07	.41	
Stoke-on-Trent	248,852	30.9	12.8	1.00	98	.90	1.63	1.04	.34	1,925 patients treated. Venereal Dispensary is at Prince of Wales' General Hospital, Tottenham. 294 new cases.
St. Helens ..	104,822	31.8	13.5	1.2	113	1.4	1.3	.78	.35	
Tottenham ..	156,020	20.04	9.3	.60	61	.93	.14	1.00	.08	
Wolverhampton	96,396	30.2	13.7	1.0	87	1.36	2.01	.93	.22	
York ..	77,591	27.7	12.7	.37	63	.77	1.26	.94	.32	179 fresh cases. 279 cases dealt with. 16 deaths from Syphilis.
WIGAN ..	90,866	30.61	15.92	1.79	124	1.72	2.02	.83	.19	

DEATH-RATE FOR WIGAN DURING THE LAST TEN YEARS.

1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
18.27	15.92	18.42	17.09	19.17	15.42	16.18	18.45	16.79	15.92

Average for Ten Years, 17.16.

Infantile Mortality.—The number of deaths of children under one year is 346, or 124 per 1,000 births, and of children over one year and under five years 197, or 2.16 per 1,000 of the population.

These figures compare with 241 deaths under one year, a rate of 117 per 1,000 in 1919.

An analysis of these 346 deaths show that they may be grouped under the following headings :—

1.	Premature Birth, Congenital Debility, Malnutrition, and Congenital Malformations	..	..	..	..	141
2.	Diarrhoea and Enteritis	..	..	..	..	34
3.	Bronchitis	..	..	..	..	39
4.	Pneumonia	..	..	..	..	46
5.	Whooping Cough	..	..	..	..	4
6.	Tuberculous Meningitis	..	..	..	..	1
7.	Atalectasis	..	..	..	..	17
8.	Erysipelas	..	..	..	..	1
9.	Meningitis	..	..	..	..	4
10.	Eclampsia Convulsions	..	..	..	..	1
11.	Gastritis	..	..	..	..	5
12.	Suffocation	..	..	..	..	1
13.	Other causes	..	..	..	..	52
						346

TABLE SHOWING METHOD OF FEEDING OF 346 INFANTS UNDER 1 YEAR, WHO DIED DURING 1920.

170	Entirely breast-fed.
36	Partly breast-fed.
19	Condensed Milk.
48	Cow's Milk.
17	Dried Preparations.
27	Miscellaneous.
29	No feeding (lived 1-2 days only).

346

Senile Mortality.—The number of deaths of persons of 60 years of age and over is 381, or 4·19 per 1,000 of population.

NO. OF DEATHS IN DIFFERENT WARDS IN WIGAN, 1920.

			Census	1st	2nd	3rd	4th		
	Ward	Pop'l'tn.	Quarter	Quarter	Quarter	Quarter	Totals	Rate	
St. George	1	4905	17	35	18	22	92	18·75	
Lindsay	2	5295	38	33	24	13	108	20·39	
St. Catherine	3	7586	35	40	19	33	127	16·74	
St. Patrick	4	9795	44	62	25	38	169	17·25	
St. Thomas	5	4382	22	19	12	19	72	16·43	
Poolstock	6	5413	27	23	16	16	82	15·14	
Victoria	7	4836	27	33	16	21	97	20·05	
St. Andrew	8	12378	56	41	29	31	157	12·68	
Swin'ey	9	7384	28	27	20	16	91	9·69	
All Saints	10	3536	21	10	7	4	42	11·87	
West Pemberton ..	11	4188	18	13	21	22	74	17·66	
North Pemberton ..	12	7379	27	31	23	26	112	15·17	
Central Pemberton ..	13	5962	23	25	20	28	96	16·10	
South Pemberton ..	14	6113	19	16	16	19	70	11·35	
Transferable Deaths ..	..	..	11	8	13	26	58	..	
Total .. ..	..	..	413	416	284	324	1447	15·92	

STATEMENT OF DEATHS OF NON-RESIDENTS OCCURRING IN WIGAN.

Deaths from—

Years.

Accidents	31	Under	1	..	..	..	9
Senile Dementia	7	1 and under	5	..	..	..	8
Senile Asthenia	9	5	15	..	..	..	13
Cancer	1	15	25	..	..	..	11
Appendicitis	5	25	35	..	..	..	10
Pneumonia	8	35	45	..	..	..	15
Typhoid Fever	1	45	55	..	..	..	18
Bronchitis	5	55	60	..	..	..	7
Suicides	1	60	65	..	..	..	5
Phthisis	4	Over	65	..	..	..	27
Other Diseases	51						
	123						123

MINISTRY OF HEALTH RETURNS.

TABLE I.—VITAL STATISTICS OF WHOLE DISTRICT DURING 1920 AND PREVIOUS YEARS.
Name of District—Wigan County Borough.

Year.	Pop'tion estimated to middle of each year. 2	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Un- corrected number. 3	Nett.		Number. 6	Rate. 7	of Non- residents registered in the District. 8	of Resi- dents not registered in the District. 9	Under 1 year of age.		At all ages.	
			Number. 4	Rate. 5					Number	Rate per 1,000 nett births. 11	Number	Rate
1									10	11	12	13
1915..	86,329	2,375	2,384	26.13	1,598	18.51	94	151	390	163	1,655	19.17
1916..	83,203	2,095	2,018	23.28	1,318	15.84	114	80	240	113	2,108	15.42
1917..	83,110	2,010	2,024	21.84	1,424	17.13	145	66	240	118	1,345	16.18
1918..	80,365	1,871	1,886	20.94	1,653	20.56	165	60	231	122	1,548	18.45
1919..	83,944	2,038	2,052	22.54	1,512	17.39	156	54	241	117	1,410	16.13
1920..	90,866	2,791	2,782	30.61	1,512	16.63	123	58	346	124	1,447	15.92

* Calculated on Registrar-General's Estimated Population, July 1st, 1920—80,866;
Area of District in Acres (land and inland water), 5,082.
At Census, 1911: Total population at all ages, 89,152; total families or separate occupiers, 16,979.
(Figures given in Census special volume for the County, also in Vols. I., VI., and VIII. of the reports of the Census of England and Wales).

TABLE II.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1920.

Name of District—Wigan County Borough.

Notifiable Disease.	Number of Cases Notified.							Total Cases notified in each locality (e.g., Parish or Ward) of the district.											Total cases removed to hospital.				
	At all ages.	At Ages—Years.						St George 1	Lindsay 2	St. Cath. 3	St. Patrick 4	St. Thom's 5	Poolstock. 6	Victoria. 7	St Andrew 8	Swinley. 9	All Saints. 10	W. Pemb. 11		N. Pemb. 12	C. Pemb. 13	S. Pemb. 14	
		Under 1	1 and under 5 yrs.	5 and under 15 yrs.	15 and under 25 yrs.	25 and under 45 yrs.	45 and under 65 yrs.																
Small-pox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever..	188	1	48	121	14	4	7	21	22	15	7	14	7	27	25	13	5	5	3	13	9	139	
Enteric Fever ..	10	—	—	2	2	5	—	1	—	—	1	—	—	1	2	—	—	3	—	—	1	8	
Diphtheria (including Membranous Croup).	64	—	25	28	5	3	—	2	2	1	3	3	3	10	7	5	2	2	14	7	3	27	
Pneumonia ..	135	17	35	31	14	24	4	13	10	19	7	18	4	20	8	2	1	1	4	1	10	3	
Puerperal Fever ..	3	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	
Relapsing Fever (R) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Typhus Fever ..	7	—	—	—	—	2	2	—	2	2	1	—	—	—	2	—	—	—	—	1	—	2	
Influenzal Pneumonia.	2	—	—	—	—	18	—	—	3	3	—	—	—	1	—	—	—	—	—	—	—	—	
Dysentery ..	25	—	—	—	—	—	—	—	2	3	—	—	—	5	1	—	2	2	4	—	—	—	
Malaria	3	—	—	3	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	
Chicken-pox ..	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Poliomyelitis ..	59	2	1	4	10	16	8	1	1	3	8	3	3	13	6	3	3	3	6	4	2	2	
Erysipelas ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Continued Fever (C)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cerebro-Spinal Meningitis ..	1	—	—	1	—	—	—	—	3	2	—	—	—	—	—	—	—	—	—	—	—	1	
Ophthalmia Neon.	29	29	—	—	—	—	—	4	—	—	—	4	—	6	2	1	1	1	1	1	—	—	
Measles ..	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	
EncephalitisLethargica	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pul. Tuberculosis ..	136	—	3	29	33	50	21	9	7	20	29	4	7	10	7	4	4	3	12	7	10	78	
Other Forms of Tuberculosis ..	37	1	4	19	7	4	2	1	1	2	6	5	2	3	3	—	—	1	—	8	1	—	
TOTALS ..	701	50	117	238	93	132	57	37	49	75	85	31	53	30	99	64	22	45	43	38	264		

Isolation Hospital or Hospitals, Sanatoria, &c.—Wigan Sanatorium, Pemberton Hospital, and Bowdon Sanatorium.

TABLE III.—DEATHS REGISTERED DURING THE CALENDAR YEAR 1920, CLASSIFIED BY AGE AND CAUSE.
Name of District—Wigan County Borough.

Causes of Death.	Nett Deaths at the Subjoined Ages of "Residents" whether occurring within or without the District.								Total Deaths whether of "residents" or "non-residents" in institutions in the district.
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.
1 All causes—Certified .. Uncertified ..	2 1443 4	3	4	5	6	7	8	9	10
1—Enteric Fever ..	3	..	..	..	..	2	1	..	..
2—Small-pox ..	..	..	..	..	..	..	..	..	..
3—Measles	104	17	36	38	13	..	..	..	..
4—Scarlet Fever..	1	..	..	..	1	..	..	..	..
5—Whooping Cough ..	8	4	2	2	..	..	..	..	..
6—Diphtheria and Croup ..	16	..	3	7	6	..	..	..	..
7—Influenza ..	25	1	1	..	3	2	8	4	6
8—Erysipelas ..	2	1	..	..	..	..	..	..	1
9—Phthisis (Pul. Tub) ..	76	..	1	2	7	19	32	13	2
10—Tuberculous Meningitis ..	5	..	..	..	3	1	1	..	..
11—Other Tubercular Diseases	13	1	2	..	3	4	2	..	1
12—Cancer (Malignant Disease)	83	..	..	1	1	..	7	51	23
13—Rheumatic Fever ..	1	..	..	..	..	..	1	..	..
14—Meningitis ..	13	4	1	1	5	..	1	1	..
15—Organic Heart Disease	119	5	1	..	6	10	26	41	30
16—Bronchitis ..	184	39	10	3	3	2	12	65	50
17—Pneumonia (all forms)	157	46	23	16	8	5	20	25	14
18—Other Diseases of Resp. Org...	..	..	..	..	..	..	..	..	..
19—Diarrhoea and Enteritis ..	42	34	8	..	..	..	..	..	..
20—Appendicitis and Typhilitis..	1	..	..	..	..	..	1	..	..

TABLE III.—DEATHS REGISTERED DURING THE CALENDAR YEAR 1920, CLASSIFIED BY AGE AND CAUSE.
Name of District—Wigan County Borough.

Causes of Death.	Nett Deaths at the Subjoined Ages of "Residents" whether occurring within or without the District.								Total Deaths whether of "residents" or "non-residents" in institutions in the district.
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.
1									
21—Cirrhosis of Liver	2	3	4	5	6	7	8	9	10
21a—Alcoholism	2	..	..	..	..	..	..	2	..
22—Nephritis and Bright's Dis. ..	..	..	..	..	..	..	..	..	..
22a—Nephritis and Bright's Dis. ..	19	1	1	1	..	1	1	13	1
23—Puerperal Fever .. ..	..	..	..	..	..	..	..	..	..
24—Other Accidents and Diseases of Pregnancy and Parturition	8	..	..	..	..	3	5	..	..
25—Congenital Debility and Malformation, incl. Prem. Birth	141	141	..	..	..	..	..	..	..
26—Violent Deaths, excluding Suicide.. ..	46	..	3	6	11	1	5	14	6
27—Suicide	9	..	..	..	..	2	1	6	..
28—Other Defined Diseases	303	31	4	13	20	6	29	64	136
29—Diseases Ill-defined or Unknown	66	21	7	4	3	1	7	10	13
TOTALS	1447	346	103	94	93	59	160	309	283
Sub-entries (included in the above figures):—									
14—(a) Cerebro-Spinal Meningitis	1	..	..	..	1	..	..	..	..
28—(a) Poliomyelitis .. ..	..	..	..	..	..	..	..	..	..
Syphilis	4	4	..	..	..	..	..	..	..

Typhus), Diphtheria, and Diarrhoea, gives us a rate of 1·79 per 1,000 of the population, against ·78 in 1919.

The deaths numbered 163, as against 67 in 1919.

The Zymotic-rate, 1·79, is made up as follows :—

DEATH-RATES PER 1,000.

	1920	1919
Small-pox .. .. .	..	..
Scarlet Fever	·01	·10
Measles	1·14	·07
Whooping Cough	·08	·04
Typhus Fever .. .. .	..	..
Enteric Fever	·03	·03
Diphtheria	·17	·17
Diarrhoea	·34	·35

The Zymotic-rate during each of the four quarters was :—

	1920	1919
1st Quarter	2·20	7·65
2nd „	3·08	1·48
3rd „	1·84	1·42
4th „	1·23	·95

TABLE OF ZYMOTICS.

					Notified.	Died.	Case Mortality %.
Small-pox	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	118	1	.84
Enteric Fever	..	..	..	..	10	3	.30
Diphtheria	..	..	..	..	64	16	25.00
Measles	..	..	..	..	264	104	..
Whooping Cough	..	..	..	..	..	8	..
Diarrhœa	..	..	..	..	..	31	..

Number of Notifications, including Civil and Military Cases, compared with other years:—

Disease.	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Small-pox	7	0	0	0	0	0	0	0	0	0
Typhus	0	0	1	1	0	0	0	0	0	0
Scarlet.. .. .	176	142	71	222	1608	820	231	174	339	188
Enteric	151	73	97	67	45	89	29	31	21	10
Continued	0	0	0	0	0	0	0	0	3	0
Diphtheria	66	38	34	43	37	37	40	29	46	64
Puerperal	7	4	6	5	4	6	4	5	7	3
Cholera	0	0	0	0	0	0	0	0	0	0
Erysipelas	84	47	56	82	83	60	48	43	66	59
Ophthalmia Neonatorum	0	6	0	0	1	13	23	13	26	29
Acute Poliomyelitis	0	6	0	0	1	0	3	3	1	1
Cerebro-Spinal Meningitis	0	0	0	1	0	0	2	3	2	1
Measles	0	0	0	0	0	285	2907	1055	126	264
Pulmonary Tuberculosis	0	217	207	236	233	178	188	197	139	136
Other Forms of Tuberculosis	0	0	61	124	107	92	134	84	70	37
Pneumonia	0	0	0	0	0	0	0	0	110	135
Influenzal Pneumonia	0	0	0	0	0	0	0	0	60	7
Dysentery	0	0	0	0	0	0	0	0	6	2
Malaria	0	0	0	0	0	0	0	0	48	25
Chicken-pox	0	0	0	0	0	0	0	0	2	3
Encephalitis Lethargica	0	0	0	0	0	0	0	0	2	1
Total	941	553	549	803	2151	1580	3609	1637	1074	965

ANALYSIS OF NOTIFICATIONS, 1920.

Disease.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Scarlet Fever	50	21	24	15	7	10	17	5	12	8	13	6	188
Enteric Fever	2	0	1	1	0	1	2	0	2	0	0	1	10
Diphtheria	6	10	11	5	1	6	3	7	3	1	8	3	64
Puerperal Fever	0	1	0	0	0	0	2	0	0	0	0	0	3
Erysipelas	4	9	6	4	5	5	6	5	2	4	4	5	59
Cerebro-Spinal Meningitis	0	0	0	0	0	0	0	0	0	0	1	0	1
Ophthalmia Neon.	2	4	2	4	5	2	4	0	1	0	3	2	29
Acute Poliomyelitis	0	0	0	0	0	0	0	1	0	0	0	0	1
Measles	13	17	176	41	0	17	0	0	0	0	0	0	264
Phthisis	15	13	11	14	8	14	10	3	7	16	11	14	136
Other Tubercular Diseases	3	2	5	5	5	1	4	1	3	2	3	3	37
Pneumonia	4	12	32	22	16	6	10	4	7	4	7	11	135
Influenzal Pneumonia	0	0	0	6	1	0	0	0	0	0	0	0	7
Dysentery	0	2	0	0	0	0	0	0	0	0	0	0	2
Malaria	10	5	4	1	1	1	1	1	1	0	0	0	25
Continued Fever	0	0	0	0	0	0	0	0	0	0	0	0	0
Chicken-pox	0	3	0	0	0	0	0	0	0	0	0	0	3
Encephalitis Lethargica	0	0	0	0	0	0	0	0	1	0	0	0	1
Total	109	99	272	118	49	63	59	27	39	35	50	45	701

SMALL-POX.

We have had no case of Small-pox during the year.

VACCINATION RETURNS, 1918-1919.

The following Vaccination Returns have been supplied to me by the Vaccination Officer, Mr. R. Halliwell, J.P.:—

	1918	1919
Births Registered	1337	1481
Successfully Vaccinated	465	489
Insusceptible	4	1
Exemptions, Section 2, 1899	668	815
Died, Unvaccinated	98	99
Postponed by Certificates	2	..
Left Town and Reported to other Districts	3	2
Cannot Trace	6	1
Refusals and Not Accounted for	91	74

Total Number of Successful Vaccinations (all ages)	1911	1118
"	1912	1153
"	1913	895
"	1914	860
"	1915	860
"	1916	769
"	1917	736
"	1918	617
"	1919	484
"	1920	617

The continued decline in the number of infants vaccinated is most regrettable, and should Small-pox appear in the Borough will have its inevitable consequence.

SCARLET FEVER.

Number of Notifications	188
Number of Deaths	1
Death-rate per 1,000	·01

The number of notifications of this disease is, for 1920, 188, against 339 in 1919. One death occurred, giving a rate of ·01, as against 9 deaths with a rate of ·10 in 1919.

1920.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Notifications ..	50	21	24	15	7	10	17	5	12	8	13	6	188
Removed to Hospital	36	16	16	10	6	7	13	4	10	6	11	4	139
Deaths	1	0	0	0	0	0	0	0	0	0	0	0	1

The percentage of removals to Sanatorium has been 73·93, against 68·14 in 1919 and 67·81 in 1918.

We have 1 death amongst those notified ; which occurred in hospital ; giving a fatality-rate of ·7 of hospital-treated cases as against 4·01 in 1919.

AGE INCIDENCE OF SCARLET FEVER.

	MONTHS				YEARS												Total	
	1—3	3—6	6—9	9—12	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—15	15—20	20 & over		
Ages	1—3	3—6	6—9	9—12	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—15	15—20	20 & over	Total	
Total Number of Notifications	..	..	1	..	3	7	13	23	22	21	17	11	14	37	11	8	188
Under 1 year	}				}				}				}					
From 1 to 5 years ..	}				}				}				}					
“ 5 to 10 years ..	}				}				}				}					
Over 10 years	}				}				}				}					
Sickness rate per 1,000 of the Population at each age ..	..	..	.01	..	.03	.07	.14	.25	.24	.23	.18	.12	.15	.40	.12	.08	
Deaths at different ages ..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
Percentage Mortality ..	..	..	..	..	..	..	..	..	..	..	.53	..	..	..	..	..	.53
All under 1 year	}				}				}				}					

MEASLES.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Deaths in 1920 ..	0	10	21	23	19	5	13	4	4	3	0	2	104
Deaths in 1919 ..	3	1	1	0	1	0	0	0	0	0	0	0	6
Notifications, 1920..	13	17	176	41	0	17	0	0	0	0	0	0	204

The foregoing figures show that the epidemic was of a very severe type. As notification was not compulsory the figures cannot, however, be taken as representing the fatality rate. During the epidemic several schools and Departments were closed, and children were excluded from places of entertainment.

Arrangements were made for the reception of severe cases or cases which could not be isolated; in the Sanatorium. It was not, however, possible to arrange this until the epidemic was almost at an end. In case of a future epidemic I should have no hesitation in recommending the admission of as many cases as possible even to the temporary exclusion of Scarlet Fever which has not caused as many deaths in ten years as Measles did during 1920. Owing to the comparatively short duration of infection a much larger number of cases of Measles could be passed through the Hospital than is the case with Scarlet Fever, and I have no doubt that many cases which proved fatal at home might have been saved under Hospital conditions.

WHOOPIING COUGH.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Trans	Tot.
Deaths in 1920	1	1	0	0	1	0	0	0	0	1	1	3	0	8
Deaths in 1919	0	0	0	0	0	2	1	0	0	0	1	0	0	4

ENTERIC FEVER.

Number of Notifications	..	..	..	10
Number of Deaths	..	..	..	3
Mortality per 1,000 of Population	..	..	..	.03
Removed to Sanatorium	..	..	..	8

We have for 1920 10 notifications against 21 in 1919, and 31 in 1918. Several of the cases removed to the Sanatorium turned out to be cases of other febrile diseases.

Enteric Fever was the cause of 3 deaths during the year, as against 3 in 1919, and 8 in 1918.

[illegible]

We had 14 specimens of blood examined at the Thompson-Yates Laboratory, Liverpool, with the following result:—Positive re-action, 2; negative re-action, 12.

INCIDENCE OF ENTERIC FEVER FOR TEN YEARS.

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Notified Cases	151	73	97	67	45	89	29	31	21	10
Deaths	29	12	13	17	10	19	—	8	3	3
Death rate per 1,000 .. ..	.32	.13	.14	.18	.11	.22	—	.09	.03	.03

AGE INCIDENCE—YEARS.

1-4	5-9	10-14	15-19	20-24	25-29	30 and Over
-	1	1	1	1	1	5

Total Cases, 10.

Houses in which cases have occurred with—

Privy Middens	..	..	..	..	..	3
Pails	..	..	..	..	..	1
Waste Water Closets	..	..	..	..	..	1
Water Closets	..	..	..	..	..	5

Number of Privy Middens, Ashpits and Cesspools in Wigan ..	..	7
" " "		Pemberton ..1572

ENTERIC FEVER.

Cases in Houses with Insanitary Conditions and Surroundings	..	1
„ Other Defects	.. .. .	—
„ where No Defects were found	.. .. .	9

List of Streets in Wigan where cases of Enteric Fever have occurred :—

Barnsley Street	..	..	1	Whelley	..	..	..	1
Dobb's Fold	..	..	1	Molyneux's Yard, Lord Street	1			
Princess Street	..	..	1	Infirmary	..	..	..	1

List of Streets in Pemberton where cases of Enteric Fever have occurred :

Dean's Yard, City Road..	2	Sydney Street	1
Richmond Hill	1		

DIARRHŒA.

Number of Deaths	1919	1920
Mortality per 1,000 of Population	30	31
	35	34

AGE INCIDENCE, 1918.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
0-1 year	-	-	-	-	-	-	2	6	9	9	-	-	26
1-2 years	-	-	-	-	-	1	-	-	4	-	-	-	5
Total	-	-	-	-	-	-	-	-	-	-	-	-	31

DIPHTHERIA.

Number of Notifications	64
Number of Deaths, including Croup	16
Mortality per 1,000 of Population	17

We have had a larger number of cases notified, namely, 64, against 46 in 1919; and the mortality is 17 per 1,000 of the population, against 17 in 1919.

The following table shows the number of cases notified and the number of deaths :—

1920.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Notified	6	10	11	5	1	6	3	7	3	1	8	3	64
Deaths	4	2	2	1	1	-	-	-	1	2	2	1	16

The following is the result of the examinations bacteriologically made at the Thompson-Yates Laboratory :—

Number of Swabs	31
Diphtheria present in	2

DIPHTHERIA CASES, 1920.

Cases in Houses—Sanitary Defects	1
„ No Defects	63

Although the number of cases notified as Diphtheria shows an increase as compared with 1919 only two swabs out of the 31 examined showed the presence of true Diphtheria bacilli.

Several cases treated in the Sanatorium were pneumo-coccal and streptococcal infections, and should probably be included among the group of diseases generally described as “Influenza.”

Others were cases of infection by the organism known as *oidium albicans*,

II.—OTHER INFECTIOUS DISEASES.

CEREBRO-SPINAL FEVER AND ACUTE POLIOMYELITIS AND ENCEPHALITIS LETHARGICA.

One case of Cerebro-spinal Fever one case of Poliomyelitis, and one case of Encephalitis Lethargica were notified.

ERYSIPELAS.

Number of Cases Notified	..	..	..	..	59
Number of Deaths	..	..	..	..	2
Mortality per 1,000 of Population	..	..	..	..	·02

We have a smaller number of notifications than in 1919, and we have 2 deaths.

Cases in Houses with	Insanitary Surroundings	..	..	—
„	Defects	..	..	—
„	No Defects	..	..	59

PUERPERAL FEVER.

Number of Cases Notified	..	..	..	..	3
Number of Deaths	..	..	..	..	—
Mortality per 1,000 of Population	..	..	..	..	—

VENEREAL DISEASES.

The scheme for the Diagnosis and Treatment of Venereal Diseases is now fully established, and particulars will be found below:—

ROYAL ALBERT EDWARD INFIRMARY,
WIGAN,

VENEREAL DISEASES.

ANNUAL RETURN by the Assistant Medical Officer of Health of the Treatment Centre. To the Medical Officer of Health of the County or County Borough of Wigan.

Return relating to persons residing in the County or County Borough of Wigan who were treated at the Treatment Centre at Wigan Infirmary during the year ending on the 31st December, 1920.

Borough. County.

(a) Number of persons from each area dealt with during the year at or in connection with the Out-Patient Clinic for the first time and found to be suffering from:—

Syphilis	..	..	..	..	..	148	..	71
Soft Chancre	..	..	..	..	..	6	..	2
Gonorrhœa	..	..	..	..	..	60	..	35
Conditions other than Venereal	..	..	..	..	..	19	..	16
Total	..	..	..	..	..	233	..	124

(b) Total number of attendances at the Out-Patient Clinic of all patients residing in each area 2324 ..1266

(c) Aggregate number of "In-patient days" of all patients residing in each area 169 .. 184

(d) Number of doses of Salvarsan substitutes given to patients residing in each area in the :—

(1) Out-patient Clinic 1101 .. 507 (2) In-patient Department .. 17 .. 14
---	----	----	----	----	----	----	----	----

(e) Give the names of Salvarsan substitutes used in the treatment of syphilis and the usual initial and final doses ..Neokharsivan, .15 .45, .6, and .75 gms.
Neovarsenobillon, .45, .6, .75, and .3 gms.
Hectine, 40 c.c.s.
Galyl, 20 gms, 30 gms., and 40 gms.

(f) State the number of doses of Salvarsan substitutes usually given in a full course of treatment 7 doses.

(g) State in what proportion of cases, approximately, Salvarsan substitutes are used in the treatment of syphilis .. 100 per cent.

(h) State the nature of tests applied in deciding as to discharge of patients Syphilis. Four negative Wasserman tests one year after the treatment is finished.
Gonorrhœa: No threads in urine, and negative bacteriological examination.

THE WORK OF THE HOSPITALS.

I.—HOSPITAL FOR ACUTE INFECTIOUS CASES. WHELLEY.

76 Beds.

RESIDENT STAFF IN 1920.

Matron.

2 Sisters.
1 Nurse.
9 Probationers.
1 Laundress.
1 House-maid
1 Waitress.

1 Cook.
2 Ward-maids.
1 Kitchen-maid.
1 Gardener.
1 Assistant Gardener.
1 Boilerman.

	Notifications	Removed to Hospital		Died in Hospital	
		Wigan patients.	Out-dist. patients.	Wigan patients.	Out-dist. patients.
Scarlet Fever	188	139	3	1	..
Enteric Fever	10	8	4	2	2
Diphtheria and Memb.*Croup ..	64	27	2	5	..
Pneumonia	135	3	..	1	..
Influenzal Pneumonia	7	2	..	1	..
Dysentery	2	..	..	..	..
Malaria	25	..	..	..	..
Chicken-pox	3	..	..	..	..
Poliomyelitis	1	..	..	..	..
Erysipelas	59	2	..	..	..
Continued Fever .. .. .	..	..	..	..	..
Cerebro-Spinal Meningitis ..	1	1	..	1	..
Ophthalmia Neonatorum ..	29	..	..	..	..
Pulmonary Tuberculosis	136	..	..	2	..
Other forms of Tuberculosis ..	37	..	..	1	..
Measles	264	4	..	1	..
Encephalitis Lethargica	1	1	..	1	..
Puerperal Fever	3	..	..	..	..
Others .. .. .	..	..	..	..	..
Totals	965	187	9	16	2
		196		18	

In the Whelley Hospital on December 31st, 1920, there were 9 patients, namely, Scarlet Fever 7, Enteric Fever 1, other diseases 1.

Whelley Hospital.	Small-pox.	Scarlet.	Enteric.	Others.	Total.
In-patients, Jan. 1, 1920	36	6	1	43
Admitted in 1920	143	12	40	196
Discharged ,,	170	13	29	212
Died ,,	1	4	13	18
In-patients, Jan. 1, 1921	7	1	1	9

The number of deaths in the Whelley Hospital was 18; 1 died from Scarlet Fever, 4 from Enteric Fever, and 13 from other diseases, as against 9 deaths from Scarlet Fever, 2 from Enteric Fever, and 14 from other diseases, in 1919.

2.—PEMBERTON CONSUMPTION HOSPITAL.

26 Beds.

STAFF

Sister-in-Charge.

2 Assistant Nurses.

Ward-maid.

Cook.

Porter-Gardener.

Laundress.

Assistant-Gardener.

Kitchen-maid.

PARTICULARS OF ADMISSIONS AND DISCHARGES.

BOROUGH PATIENTS.

				Insured.		Non-Insured.		Children under 16.		Total.
				M.	F.	M.	F.	M.	F.	
Admitted	..	..	..	36	7	—	10	6	5	64
Discharged	..	..	..	30	5	1	4	4	4	48
Died	..	..	..	5	1	—	5	1	1	13

COUNTY PATIENTS.

				Insured.		Non-Insured.		Children under 16.		Total.
				M.	F.	M.	F.	M.	F.	
Admitted	..	..	..	6	3	—	1	1	—	11
Discharged	..	..	..	3	—	—	3	1	—	7
Died	..	..	..	4	1	—	—	—	—	5

TOTAL PATIENTS TREATED.

				Insured.		Non-Insured.		Children under 16.		Total.
				M.	F.	M.	F.	M.	F.	
Admitted	..	..	..	42	10	—	11	7	5	75
Discharged	..	..	..	33	5	1	7	5	4	55
Died	..	..	..	9	2	—	5	1	1	18

Patients	in on January 1st,	1920..	..	..	..	..	23
„	admitted	1920..	..	..	..	..	75
„	discharged	1920..	..	..	..	..	55
„	died	1920..	..	..	..	..	18
„	remaining Jan. 1st,	1921..	..	..	..	..	25

CONDITION ON DISCHARGE.

BOROUGH PATIENTS.

				Insured.		Non-Insured.		Children under 16.		Total.
				M.	F.	M.	F.	M.	F.	
Improved	..	..	..	15	4	1	1	2	4	27
Non-Improved	..	..	..	15	1	—	3	2	—	21
Total	..	..	..	30	5	1	4	4	4	48

COUNTY PATIENTS.

				Insured.		Non-Insured.		Children under 16.		Total.
				M.	F.	M.	F.	M.	F.	
Improved	..	..	..	3	—	—	3	1	—	7
Non-improved	..	..	..	—	—	—	—	—	—	—
Total	..	..	..	3	—	—	3	1	—	7

TOTAL PATIENTS DISCHARGED.

				Insured.		Non-Insured.		Children under 16.		Total.
				M.	F.	M.	F.	M.	F.	
Improved	..	..	..	18	4	1	4	3	4	34
Non-improved	..	..	..	15	1	—	3	2	—	21
Total	..	..	..	33	5	1	7	5	4	55

MATERNITY AND CHILD WELFARE.

The work in this connection has again been confined to Home Visiting, and the work of the Infant Clinics which have been open regularly throughout the year at Rodney Street and Pemberton on four afternoons per week. Three of your Lady Health Visitors are in attendance at each session, and the Medical Officer of Health attends for the examination of all Infants and Mothers referred to him. All the children attending are weighed, and advice is given as to feeding, clothing, etc. ; minor ailments are in some cases treated, but no medicines are dispensed or prescribed. All suitable cases are referred either to a private practitioner, to the Wigan Infirmary, or other Institution. In this way it may be claimed that a good deal of real preventative work is done by the discovery of disease in its early stages, and by ensuring that some form of treatment is obtained, or healthier conditions established, in many cases which would otherwise have been neglected and would have drifted into incurable disease.

The existing Clinic at Rodney Street, is, however, still imperfectly equipped, and now altogether overcrowded. No further development of the work, and no special clinic for ante-natal conditions, can be carried out until the new premises are ready for use. The whole future usefulness of this branch of our activities, as well as of our work for the school children, and all dental work, depends on adequate accommodation for Clinics being provided in the premises recently acquired by the Corporation.

The number of cases referred to Private Practitioners which would not otherwise have sought their advice is much in excess of cases treated who might have gone to their own doctor. As far as possible any form of treatment is limited to persons who cannot afford private medical fees. In this way the Clinics, so far from competing with private practitioners, must considerably increase their clientele. On the other hand, everything possible is done to wean mothers from the traditional and ingrained reliance on "the bottle of medicine" in Infantile Disorders. It is to be hoped that the practice of medicine will eventually be so organised that private practitioners will be able to support this educational propaganda without detriment to their own legitimate interests.

My experience in these Clinics has convinced me that more illness among infants, especially digestive and respiratory disease, is caused by the archaic

method of dressing infants, which is almost universal, even than by the faulty methods of feeding which are so common. Persistent efforts have been made to remedy this, with very happy results in many cases.

No "Baby Week" celebration was held, as it was found that the passing interest excited did not justify the time and labour in organising, which fell mainly on your Health Visitors and seriously interfered with their regular and much more valuable duties.

A Christmas Tree and Summer Pic-nic for persons attending the Clinics were held, and these certainly advertised our work, and did good by encouraging mothers to attend regularly.

Much valuable voluntary work has been rendered to the Clinics by Sister Amabel of the All Saints' Mission House, and by Mrs. Watts. I am glad to have this opportunity of extending my sincere appreciation of their work and cordial thanks.

A most important feature of the work of preserving infant life has been the distribution of fresh and dried milk, free and at cost price, and I have no hesitation in saying that this has been one of the factors in the reduction of our Infant Mortality.

This distribution of milk has, of course, been a considerable cost to the rates, and on this ground has been subject to much uninformed criticism by persons who have made no attempt to ascertain what in fact are the conditions under which milk is issued by the Health Department. Statements have been made to the effect that milk has been given indiscriminately to persons who could afford to pay for it, but *no individual case of the sort has ever been reported to myself or any of my staff, in spite of repeated requests that such action should be taken.*

In every case where free milk has been granted the applicant's statement as to income has been verified by application to the employers. The following is a copy of the form in which these details are ascertained :—

PUBLIC HEALTH OFFICE,

WIGAN.

NOTICE.—FOR MAKING FALSE STATEMENTS, PERSONS ARE
LIABLE TO BE PROSECUTED.

ENQUIRY FORM.

Name

Address

Number in Family

Adults.....Children { Under 14..... } Lodgers.....
 { Over 14..... }

Amount of money coming into house.....

From family

,, Lodgers

„ Insurance(*Lloyd George*)

„ Pension { Regiment } ..
 „ „ „ „ { Regimental No. } ..

„ Allowance

Number Working Names

If in pit, Number of Pit..... Tally Number

Name of Underlooker

Rent of House

Signature

Date

For EMPLOYER ONLY.

Statement of Wages—Confirmed by Employer

Signature of Employer

Date.....

It is unfortunately the case that in the present state of public opinion and morality, attempts are made by unpatriotic persons to abuse this provision for the really necessitous, but no efforts have been spared by your Health Visitors to prevent such abuse. I have also to thank the Employers of Labour in the district for the ungrudging help they have given by supplying the information asked for, both in connection with this matter and the payment of midwifery fees.

Quite recently one large firm has had to decline to give the information on the ground that their employees objected to the amount of their wages being divulged.

Since that the form has in every case been handed to the applicant, and milk has only been issued when it has been returned with the Employer's Signature. This places the onus of supplying the information on the applicant and saves both time and postage to the Employers and your Staff.

A regrettable feature is the amount of the time which is thus absorbed, by your Health Visitors, in purely almoner's work.

The following are the details of the amount of fresh and dried milk distributed, and the actual cost to the Corporation:—

DISTRIBUTION OF FRESH AND DRIED MILK, 1920.

Total amount of Fresh Milk distributed free	13414 gallons.
Total cost to Corporation	£2120 10s. 4d.
Persons receiving Free Milk at beginning of year ..	124
Persons receiving Free Milk at end of year ..	133
	T. C. Q. lb.
Total amount of dried Milk distributed free	2 7 1 4
	£ s. d.
Total Cost	1599 4 0
Total amount received from Sales	1024 7 8
Nett Cost to Corporation	£574 16 4
Average number receiving Dried Milk free per week ..	28
Quantity given per week per person (free) ..	2lb.

In all suitable cases parents are urged to use fresh milk, but dried milk has a great advantage, from the point of view of the hard-pressed mother, that a week's supply can be taken home at once. Dried milk has also a uniform constitution, which is a great advantage where accurate dilution is required, and it is also less liable to contamination and to fermentative changes. It has now been shown that even the vitamins of milk are not all destroyed by the drying process, and the experience of very large numbers prove that children fed exclusively on dried milk are quite as well nourished as any others. This can be absolutely demonstrated in our own Clinics, and I am satisfied that the use of dried milk as a substitute for fresh milk, especially in times of epidemic diarrhoea, and in houses where there are no facilities for clean and cool storage of fresh milk, is absolutely essential to the welfare of the children. We have had no case of rickets among the children fed on dried milk, possibly because in all these cases the parents are instructed as to the necessity of fresh air in the growth of the child.

MATERNITY AND CHILD WELFARE.

The following table gives a summary of the visits of the five women Health Visitors during 1910.

TABLE 1.—TOTAL VISITS IN WIGAN.

Wards.	Births.	Revisits.		Deaths.		Diarrhoea Deaths.		Midwives.	Measles.	Ophthalmia.	Other Infants' Diseases.	Special Visits.	Still-births.	Total.
		Under 12 months.	Over 12 months	Under 12 months.	Over 12 months	Under 12 mon's	Over 12 mon's							
1. St. George ..	210	194	384	26	17	—	—	—	21	4	—	24	11	891
2. Lindsay..	158	242	319	26	24	—	—	15	17	3	—	35	6	845
3. St. Catharine ..	275	229	170	26	19	2	—	17	14	2	—	41	13	808
4. St. Patrick ..	320	269	229	44	21	1	1	27	7	2	—	45	10	976
5. St. Thomas ..	178	208	107	25	11	—	—	5	28	1	—	118	12	693
6. Poolstock ..	181	194	483	20	13	1	1	9	68	4	—	29	7	1010
7. Victoria ..	198	130	91	28	16	—	—	2	55	6	—	15	9	544
8. St. Andrew ..	312	272	129	32	18	2	—	8	161	2	—	55	12	1007
9. Swinley ..	145	137	266	11	6	—	—	1	35	1	—	24	4	631
10. All Saints ..	89	88	80	8	8	—	—	4	4	1	—	302	9	593
11. W. Pemberton..	144	193	171	21	10	2	—	7	—	1	4	—	6	559
12. N. Pemberton..	231	420	212	27	17	3	1	1	—	1	—	—	6	949
13. C. Pemberton ..	150	174	89	18	11	—	—	7	—	1	—	10	8	468
14. S. Pemberton ..	157	244	510	19	4	4	—	15	69	1	—	23	5	1051
	2778	2994	3240	331	195	15	3	118	479	29	4	721	118	11025

48 sanitary defects were reported to the Chief Sanitary Inspector.

CLINICS.

The following Tables give statistical details of the work done by the Clinics :—

TABLE 2.

ATTENDANCE AT BABY CLINIC.

Total attendances of Babies and Mothers	..	22,340
Primary attendances of Babies and Mothers	..	1,151

TABLE SHOWING ATTENDANCES.

Weekly	..	..	..	..	..	..	388
Fortnightly	..	..	..	..	..	..	42
Monthly	..	..	..	..	..	..	28
Irregularly	..	..	..	..	..	..	688
Once only	..	..	..	..	..	..	565
Total	..	..	..	..	..	..	1,711

577 cases seen by the Medical Officer of Health during 1920. 10 deaths among children attending Clinics.

The children came from the following Wards :—

Ward.	No. of Children.
No. 1.—St. George	114
No. 2.—Lindsay	99
No. 3.—St. Catharine	178
No. 4.—St. Patrick	259
No. 5.—St. Thomas.. .. .	127
No. 6.—Poolstock	146
No. 7.—Victoria	140
No. 8.—St. Andrew.. .. .	121
No. 9.—Swinley	39
No. 10.—All Saints	46
No. 11.—West Pemberton	47
No. 12.—North Pemberton	149
No. 13.—Central Pemberton	113
No. 14.—South Pemberton	111
Outside the Borough	22
Total	1,711

MIDWIVES ACT, 1902.

Forty-one midwives were registered, as practising within the Borough, all of whom have been regularly visited at their homes, and followed when out to their cases. Their bags and appliances were also examined.

Twenty-nine cases of Ophtha'mia Neonatorum were notified, and careful instruction was given to the mothers as to the correct way to carry out the Doctor's treatment.

The following Table shows particulars of Notifications of Births received :—

41 MIDWIVES.					
	Doctors.	28	13		
		<i>Qualified.</i>	<i>Unqualified.</i>	<i>Total.</i>	
No. of Births attended by..	297	.. 1859	.. 559	..	2715
Percentage	10.93	.. 68.47	. 20.58	..	—
No. of Medical Aid Forms received	—	.. 388	.. 117	..	505
No. of Still-births notified..	17	.. 76	.. 25	..	118

Of the 41 Midwives, 8 reside outside the Borough.

Artificial Feeding, 4 ; Death of Mother, 1 ; Death of Baby, 1 ; Laying out Dead Body, 1.

The reasons for sending for medical aid, as far as can be ascertained, are as follows :—

(1) Complications of pregnancy, namely : Abortion, 10 ; Miscarriage, 3 ; Prematurity, 41. Total, 54.

(2) Abnormal Presentations, 26.

(3) Complications of Labour, namely : Delayed Labour, 149 ; Contracted Pelvis, 5 ; Uterine Inertia, 3 ; Ante-partum Hæmorrhage, 2 ; Adherent Placenta, 9 ; Post-partum Hæmorrhage, 15 ; Ruptured Perineum, 48 ; Rigid Perineum, 3 ; Rigid Os, 2 ; Retained Membrane, 5 ; Pains in Head. Puffiness in Hands and Feet, 1 ; Prolapsed, 1 ; Placental Previa, 2 ; Accidental Hæmorrhage, 1 ; Total, 246.

(4) Complications of Puerperium and other Illnesses of Patient, namely Rise of Temperature and Rapid Pulse, 14 ; Inflammation of Breast, 1 ; Patient Ill (undefined), 22 ; Broncho-Pneumonia, 1 ; Exhaustion, 1 ; Puerperal Sepsis, 1 ; Total, 40.

(5) Illness and Abnormalities of Child, namely : Malformation, 11 ; Baby Ill (undefined), 4 ; Itcerus Neonatorum, 1 ; Dangerous Feebleness, 28 ; Baby's Eyes, 79 ; Circumcision, 3 ; Spina Bifida, 1 ; Convulsions, 3 ; Rash on Baby, 2 ; Pemphigus, 4 ; Hæmorrhage Bowel, 1 ; Hare-lip and Cleft Palate, 1 ; Inflammation Breast (Baby), 1. Total, 139.

PUERPERAL FEVER.

There have been 3 cases and no deaths from Puerperal Fever, as compared with 7 cases and 3 deaths in 1919.

III.—TUBERCULOSIS.

The number of deaths from Phthisis is 76, against 90 in 1919 and 99 in 1918. The number of deaths from other Tubercular affections is 18, against 16 in 1919 and 14 in 1918.

The rates are as follows :—

Phthisis Pulmonalis83 per 1,000 of population.

Other Tuberculous Diseases. .19 ,, ,,

If taken together as Tuberculous affections, we have 94 deaths, or a rate of 1.03 per 1,000 of population.

PULMONARY PHTHISIS AND TUBERCULOUS DISEASES.

The deaths occurred in the following Wards :—

Wards.	Phthisis.	Other Tubercular. Diseases.	Total.—
No. 1—St. George	4	—	4
No. 2—Lindsay	5	2	7
No. 3—St. Catharine.. .. .	10	2	12
No. 4—St. Patrick	10	6	16
No. 5—St. Thomas	2	—	3
No. 6—Poolstock	4	—	4
No. 7—Victoria	4	1	4
No. 8—St. Andrew	9	2	11
No. 9—Swinley	1	—	1
No. 10—All Saints	3	1	4
No. 11—West Pemberton	3	—	3
No. 12—North Pemberton	7	—	7
No. 13—Central Pemberton	4	2	6
No. 14—South Pemberton	5	2	7
Transferable Deaths	5	—	5
Totals	76	18	94

The following table shows the Comparative figures for 1916, 1917, 1918, 1919, and 1920, as regards Pulmonary cases :—

	1916	1917	1918	1919	1920
Number of Notifications	178	188	197	139	136
Deaths	86	122	99	90	76
Fatality-rate per cent.	48.31	64.89	50.51	64.74	55.88
Death-rate per 1,000	1.03	1.46	1.23	1.07	.83

COUNTY BOROUGH OF WIGAN.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1911 & 1912.

SUMMARY OF NOTIFICATION DURING 1920.

Number of Notification on Form A.													Number of Notification on Form B.				Number of Notifications on Form C.	
Age Periods.	Primary Notifications.												Total Notifications (i.e., including cases previously notified by other doctors)	Total Notifications (i.e., including cases previously notified by other doctors)	Poor Law Institutions.	Sanatoria.		
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 & up- wds.	Tot.						
	un- der 5	5 to 10	10 to 15	Tot														
Pul. Males ..	..	1	5	2	6	9	12	16	7	3	..	65	..	1	1	3	16
„ Females ..	..	2	7	5	9	7	11	5	6	5	..	60	..	3	6	1	5
Non-pul. Males ..	..	1	4	2	1	1	2	..	..	..	..	12	..	1	3	1	..
„ Females..	1	2	6	3	2	2	2	..	1	..	..	21	..	3	5	..	2

Patients admitted in Local Institutions. 75.

(Signature) FRED E. WYNNE, B.A., M.B., D.P.H.,
MEDICAL OFFICER OF HEALTH.

CASES OF TUBERCULOSIS (ALL FORMS) NOTIFIED IN 1920.

Wards.	Population, Census 1911	Pulmonary Tuberculosis	Other forms of Tuber'losis.	Totals
No. 1—St. George	4,905	9	1	10
No. 2—Lindsay	5,295	7	1	8
No. 3—St. Catharine	7586	21	2	23
No. 4—St. Patrick	9,795	28	5	33
No. 5—St. Thomas	4,382	4	5	9
No. 6—Poolstock	5,413	6	2	8
No. 7—Victoria	4,836	7	2	9
No. 8—St. Andrew	12,378	11	6	17
No. 9—Swinley	7,384	7	2	9
No. 10—All Saints	3,536	4	..	4
No. 11—West Pemberton..	4,188	3	1	4
No. 12—North „ ..	7,379	11	..	11
No. 13—Central „ ..	5,962	8	8	16
No. 14—South „ ..	6,113	10	2	12
Totals	89,152	136	37	173

NOTIFICATIONS OF TUBERCULOSIS (PER CENT. OF POPULATION) IN
WARDS, DURING THE YEARS 1912-1920.

WARDS:-

St. George.

Lindsay.

St. Catharine.

St. Patrick.

St. Thomas.

Poolsteck.

Victoria.

St. Andrew.

Swinley

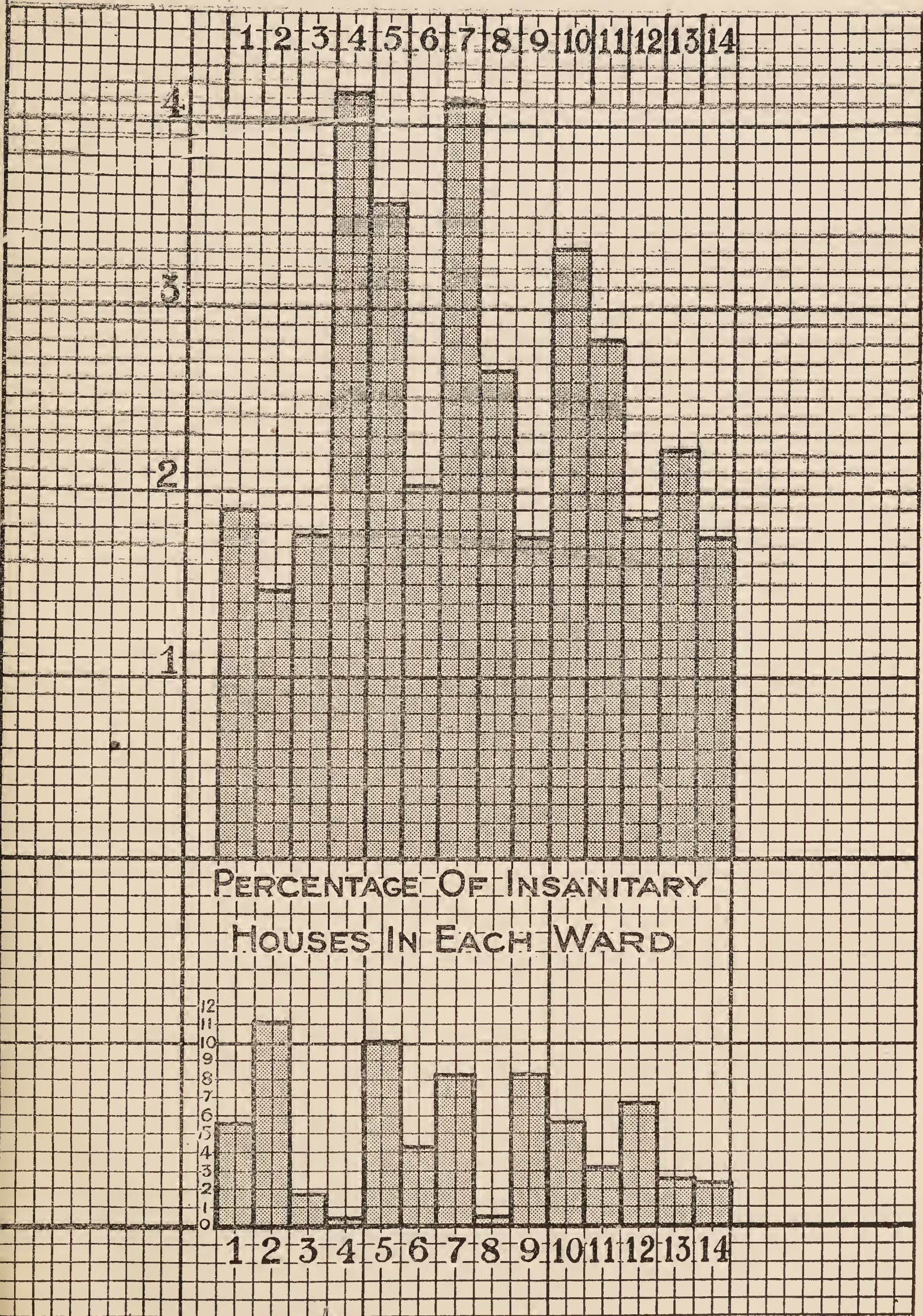
All Saints

W. Pemberton.

N. Pemberton.

C. Pemberton.

S. Penblirton.



WARDS.																
	TOTAL.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
No. of Houses ..	17413	881	1051	1467	1731	844	1063	968	2460	1616	677	818	1468	1220	1149	
No. of Insanitary Houses..	771	51	116	28	3	85	45	78	12	131	40	25	100	30	27	
Percentage of Insanitary Houses ..	4.42	5.78	11.03	1.90	0.17	10.07	4.23	8.05	0.48	8.10	5.90	3.05	6.81	2.45	2.34	
		St. George.	Lindsay.	St. Catharine.	St. Patrick.	St. Thomas.	Poolstock.	Victoria.	St. Andrew.	Swinley.	All Saints.	West Pemberton.	North Pemberton.	Central Pemberton.	South Pemberton.	

The above Tables and the accompanying diagram have been designed to show the relation between the incidence of Tuberculosis and the number of Insanitary Houses in each Ward of the Borough.

The results are somewhat startling, and will be disconcerting to those who believe that in re-housing alone will be found the solution of the Tuberculosis problem.

The red columns in the diagram indicate the notifications of Tuberculosis in the years 1912 to 1920 reduced to percentages of the population. The black columns indicate the percentage of insanitary houses in each Ward.

The latter figures are calculated on the results of the special Housing Survey which was made in the end of 1919, and it should be explained that in this connection "Insanitary Houses" means those which are structurally insanitary, which in normal times would be scheduled either for demolition or for closure pending radical alterations. This definition therefore does not include insanitary conditions due to overcrowding, ignorance, careless, and dirty habits, unpaved yards, privy middens, &c.

The fact remains however that St. Patrick's Ward, which has the lowest percentage of insanitary houses, in the sense above described, has the highest incidence of Tuberculosis, while the adjoining Lindsay Ward, with the highest percentage of Insanitary Houses, has the lowest incidence of Tuberculosis.

On the other hand, as will be seen from p. 17 of this report, Lindsay has actually the highest general death-rate for 1920 of any Ward in the Borough, viz., 20.39 as compared to 17.25 in St. Patrick's. I can only conclude that this apparent discrepancy is associated with the very large percentage of Irish people resident in St. Patrick's Ward. As this suggestion, when made in a previous report of mine, on the subject, aroused considerable controversy and even some indignation, I must remind my readers that I am myself an Irishman and therefore no further "injustice to Ireland" is intended. The belief is at all events widely held that the Irish are as a whole very susceptible to the infection of Tuberculosis, and it is certainly my experience that the Western Celts, and their descendants born in England, do not as a rule adapt themselves readily to urban and industrial conditions.

Leaving St. Patrick's Ward then out of consideration, it will be seen that the highest incidence of the disease is found in St. Thomas's Ward, Victoria Ward, and All Saint's Ward. That is to say *it is concentrated in the centre of the town* in the Wards where houses are thick on the ground, and there is no direct connection with the outlying and rural parts of the Borough. On the edges of the Borough the incidence of the disease is as it were thinned out.

The moral of these observations is fairly obvious. It is that in all Housing Schemes the policy of getting people away from the centre should be adhered to. That the number of houses per acre should be kept as low as may be economically possible, and that there should be strict supervision and practical education of all tenants in newly-erected property, under some such system as the admirable one successfully inaugurated many years ago by Miss Octavia Hill. But even these improvements when brought about will not eradicate Tuberculosis without an earnest determination to put a stop to the pollution of the atmosphere by smoke, both domestic and industrial, and a more rigorous isolation of advanced and highly infectious cases of the disease.

REPORT OF THE TUBERCULOSIS OFFICER.

To the Chairman and Members of the Health Committee.

MADAME AND GENTLEMEN,

I beg to present my Annual Report of the work done for the Corporation at the Tuberculosis Dispensary during 1920.

One hundred and fifty-one doubtful cases (insured and non-insured) were referred to me during the year, as compared with 201 in 1919, 225 in 1918, and 198 in 1917.

SANATORIUM BENEFIT.

The number of applications received during the year was 67, as compared with 76 in 1919, 95 in 1918, 99 in 1917, and 78 in 1916. The total number of applications for Sanatorium Benefit received since its commencement in July, 1912, to the end of 1920 is 711.

As in previous years nearly all the applications were made through the Dispensary Staff on receipt of notification by a medical practitioner, or after diagnosis by a Tuberculosis Officer. Almost every insured case actually applies for sanatorium benefit.

The occupations of the applicants were as follows :—

Colliers	..	..	..	..	..	..	..	27
Cotton Operatives	..	..	..	..	..	..	..	9
Discharged Ex-Service Men	..	..	..	..	..	..	..	21
Clerk and Shop Assistant	..	..	..	..	..	..	..	2
Domestic Servants	..	..	..	..	..	..	..	4
Tailor and Tailoresses	..	..	..	..	..	..	..	2
Labourer and Chaffeur	..	..	..	..	..	..	..	2
								—
								67
								—

Twenty-one of the applicants gave a history of having been in the army. The total number of discharged tuberculous sailors and soldiers who have been dealt with through the Insurance Committee to the end of 1920 was 96. Two of these were on our books previous to joining the army. If their general condition rendered a period of institutional treatment desirable, they received priority, without any marked detriment to the claims of the civil population.

One of the applicants for sanatorium benefit died before examination, and of the remaining 66 at time of first examination by a Tuberculosis Officer :—

21 were in Stage I. (Turban's Stadia).

14 „ „ II.

28 „ „ III.

3 were non-pulmonary.

Thus 29, or 43·9 per cent., of the applicants were in Stage III. on application.

Recommendations were made to the Insurance Committee as under :—

TUBERCULOSIS OFFICER'S RECOMMENDATIONS.

	Males.	Females.	Total.
Number of applicants	54	13	67
Sanatorium Treatment	18	3	21
Pemberton Hospital	22	5	27
Special Nourishment	7	—	7
Domiciliary Treatment only	6	3	9
Died before examination	—	1	1
No action necessary	1	1	2

Special nourishment was also recommended in 15 other cases where the patients were recommended for institutional treatment. Of these 6 were ex-service men.

163 recommendations for special nourishment were made for old cases, including ex-service patients.

In the case of ex-service men, special nourishment is provided by the Local War Pensions Committee on my recommendation.

In all cases the panel doctor is asked to give domiciliary treatment pending examination by a Tuberculosis Officer and the decision of the Sub-Committee

Particulars of admission and discharge of patients to and from residential institutions are given below :—

Institution.	Admitted.	Discharged.	Died.
Dean Head Sanatorium	3	2	—
Stanhope Sanatorium	5	5	—
Crossley Sanatorium	8	8	—
Bowdon Sanatorium	2	1	—
Pemberton Hospital	43	35	6

Of the above admissions to Crossley Sanatorium four men were discharged soldiers. Four of the patients admitted to Stanhope Sanatorium were ex-service men. Two of the patients admitted to Dean Head Sanatorium were also ex-service men. Of those admitted to Pemberton Hospital 14 were ex-service men.

The conditions of patients on discharge is shown as under:—

Institution.	Improved.	Not Improved.	Total.
Dean Head Sanatorium	2	—	2
Stanhope Sanatorium	4	1	5
Crossley Sanatorium	7	1	8
Bowdon Sanatorium	1	—	1

Patients receive domiciliary treatment from their panel doctors both before and after treatment in an institution. They receive in addition dispensary supervision of their hygienic routine and home surroundings. Those who are fit to attend the dispensary are encouraged to do so regularly, and each case is reconsidered with a view to modification of treatment every two months. At the end of the year 191 insured persons were under supervision and 150 non-insured, as compared with 201 insured and 377 non-insured at the end of 1919.

The total number of tuberculous cases under supervision or treatment at the end of the year was 341, including 47 ex-service men. Special attention has been given to these latter and close co-operation has been maintained with the Local War Pensions Committee. A whole-time Health Visitor devotes her time to assisting at the dispensary and visiting the patients at their homes with a view to instructing the patients and their friends.

Sanatorium Benefit commenced in July, 1912, and 711 applications were received to the end of the year.

Of the 711 applicants there were 191 persons under supervision at the end of the year. Of these :—

76	were on or fit for full work	} at the end of 1920.
22	„ „ light work	
93	were unfit for any work	

i.e., the working capacity was fully or partially restored and maintained in at least 98 cases, or practically 51·3 per cent. of those traced. On the other hand 312 were known to be dead, and it is significant that many were in stage III (*i.e.*, cases with extensive lung disease) at the time of first examination by a Tuberculosis Officer.

The following analysis of the deaths from tuberculosis occurring in insured persons in the Borough during the past few years is instructive, as showing the length of time between application for Sanatorium Benefit and the death of the patient :—

Total applications for Sanatorium Benefit to end of 1920, 711.

The number actually suffering from tuberculosis was 610.

Of these latter 312 were dead at the end of the year.

The deaths occurred as follows :—

36	deaths	within one month of application for Sanatorium Benefit.
48	„	between two and three months of application for Sanatorium Benefit.
48	„	between three and six months after application for Sanatorium Benefit.

Total of 132 deaths within six months of application for Sanatorium Benefit.

72	deaths	within one year of application for Sanatorium Benefit.
58	„	between one and two years of application for Sanatorium Benefit.
24	„	between 2 and 3 years of application for Sanatorium Benefit.
26	„	over three years after application for Sanatorium Benefit.

Thus, out of 312 deaths occurring in insured patients since the commencement of Sanatorium Benefit in July, 1912, to the end of 1920, 132 or 42·3 per cent., occurred within six months of application for Sanatorium Benefit, as compared with 121 deaths or 46·2 per cent. to the end of 1919.

NON-INSURED PERSONS.

Much of what has been said above as regards insured persons, applies equally to the non-insured. These cases receive precisely similar care and attention from the Dispensary Staff, and no distinction is made, apart from that necessarily involved in the keeping of two sets of records. They receive, as in the cases of insured persons, home treatment from their own doctors, together with dispensary treatment and supervision, as well as periods of treatment in the institutions available whenever this is required.

Particulars of admission and discharge of patients to and from residential institutions are given below:—

Institution.	Admitted.	Discharged.	Died.
Stanhope Sanatorium	—	—	—
Crossley Sanatorium	—	—	—
Bowdon Sanatorium	8	8	—
Pemberton Hospital	21	13	7

The condition of patients on discharge is shown as under:—

Institution	Improved.	Not Improved.	Total.
Stanhope Sanatorium	—	—	—
Crossley Sanatorium	—	—	—
Bowdon Sanatorium	6	2	8*

*Two patients left the institution without permission.

AFTER-CARE COMMITTEE.

The After-Care Committee has continued to do useful work, as will be seen from the following summary:—

SUMMARY OF ASSISTANCE GIVEN BY THE CARE COMMITTEE.

Persons granted nourishment	45
„ „ loan of bed, bedding	42
„ „ „ bed pans	4
„ given clothing	11

PERSONS RECEIVING MILK DURING 1902.

Insured.	Non-insured (Adults).	Non-insured (under 16 years).
14 ..	18 ..	13

The Committee have met monthly and have granted assistance as above during the year, on the recommendations of the Tuberculosis Officers and Tuberculosis Health Visitor, who attend the meetings. The work of the Committee is greatly hampered by lack of funds.

The following tables summarise the work of the dispensary in various directions :—

TABLE 1.—NEW CASES EXAMINED (AT DISPENSARY AND HOME).

	Tuberculous.					Non-Tuberculous.					Totals.				
	1916	1917	1918	1919	1920	1916	1917	1918	1919	1920	1916	1917	1918	1919	1920
Insured ..	71	112	110	95	69	35	63	71	58	39	106	175	181	153	108
Non-Insured	43	26	58	86	42	36	47	38	38	64	79	73	96	125	106
Totals	114	138	169	181	111	71	110	109	97	103	185	248	277	278	214

TABLE II.—SPUTUM EXAMINATIONS.

	1916	1917	1918	1919	1920
Positive Results	39	60	51	53	49
Negative Results	132	153	242	230	192
Totals	171	213	293	283	241

One specimen of urine and one specimen of pus were examined.

TABLE III.

	Insured.		Non-Insured.	
	1919.	1920.	1919.	1920.
(1) Total number of persons suffering from Tuberculosis under treatment or supervision during 1920	261	327	..	465 571
(2) Number of persons under treatment or supervision 31st December, 1920	201	191	..	377 150
(3) Visits by Dispensary Health Visitor :—				
	Ordinary Civil Population.		Ex-Service Men.	
				Totals.
(i.) No. of New Cases visited ..	142	..	21	.. 163
(ii.) Total No. of visits paid ..	1,680	..	481	.. 2,161
(4) No. of Disinfections carried out after removal to sanatorium or death .. .. .	..	..	—	.. 92

The figures under Table III. show an apparent discrepancy, as under heading (1) (Total number of persons suffering from Tuberculosis under treatment or supervision during 1919 and 1920) there is a material increase in 1920 as compared with 1919, whereas under heading (2) (Number of persons under treatment or supervision on 31st December), there is a decrease in the number of insured persons, and a marked decrease in the number of non-insured persons, namely, from 377 to 150. This is accounted for by the fact that a careful survey of the cases nominally under supervision has revealed that a number of these people who have been scheduled as tuberculous are now continuing at work, while others have deceased who have not previously been written off, owing to the fact that the cause of death was certified as other than from tuberculosis.

TABLE IV.—GENERAL STATISTICS.

	Insured.					Non-Insured.					Totals.				
	1916	1917	1918	1919	1920	1916	1917	1918	1919	1920	1916	1917	1918	1919	1920
I.—DISPENSARY ATTENDANCES :—															
(i.) New Patients	138	151	158	136	98	25	65	91	113	74	163	216	249	249	172
(ii.) Cases examined on discharge from an Institution	64	80	54	39	41	2	8	14	12	12	66	88	68	51	53
(iii.) Old cases examined ..	659	524	524	535	435	65	55	107	214	196	624	579	631	749	631
(iv.) Contacts examined ..	—	—	—	—	—	—	—	—	—	—	8	14	31	30	19
(v.) Total Attendances ..	861	755	736	710	574	100	142	242	339	282	961	897	978	1079	875
II.—TUBERCULOSIS OFFICERS' VISITS	23	30	31	27	39	3	8	5	15	14	26	38	36	42	53
III.—TUBERCULOSIS OFFICERS' ATTENDANCE AT MEETINGS	—	—	—	—	—	—	—	—	—	—	46	38	33	34	25

40 Dental Examinations were made which are not included in the above.

I am,

Your obedient Servant,

F. E. WYNNE,

Chief Tuberculosis Officer.

July, 1921.

General Sanitary Work.

INTRODUCTORY.

FACTORY AND WORKSHOP ACT, 1901.

SHOP HOURS ACT, 1892 TO 1905.

SHOPS ACT, 1912.

SHOP HOURS ACT, 1904, CLOSING ORDER.

MEAT INSPECTION AND SLAUGHTER-HOUSES.

DAIRIES, COWSHEDS AND MILKSHOPS ORDER, 1885 AND 1886.

HOUSING AND TOWN PLANNING ACT, 1909

REMOVAL OF NIGHTSOIL, &c.

OFFENSIVE TRADES.

EDUCATION ACT, 1902, 1904.

PUBLIC ANALYST REPORT.

RAINFALL.

INTRODUCTORY.

The general sanitary circumstances of the Borough are similar to those fully described in previous reports, and the usual description is omitted this year.

The water supply has been obtained from the usual sources, and has been of satisfactory quality.

Milk Supply.—Full particulars will be found in the Borough Analyst's report as to the quality of the samples taken.

FACTORY AND WORKSHOP ACT, 1901.

The workshops have been regularly and systematically visited by your Inspectors ; and also the factories, on receipt of report from H.M. Inspectors. The bakehouses have been regularly visited and any nuisances arising have been promptly dealt with. The regulations as to limewashing, cleanliness, etc., have been enforced. The underground bakehouses have been kept in a sanitary condition.

1.—INSPECTION.

Premises.	No. of Inspections.	No. of written Notices.
Factories (including Factory Laundries)	86	30
Workshops (including Workshop Laundries)	360	21
Workplaces .. .. .	..	..
Total	446	51

2.—DEFECTS FOUND.

Particulars.	No. of defects found.	No. of defects remedied.
<i>Nuisances under Public Health Acts :—</i>		
Want of Cleanliness	5	5
Want of Ventilation .. .. .	..	..
Overcrowding .. .. .	..	..
Want of Drainage of Floors. .. .. .	..	..
Other Nuisances	6	6
Sanitary } insufficient	9	5
Accommo- } unsuitable or defective	38	10
dation } not separate for sexes	3	3
<i>Offences under the Factory and Workshop Act :—</i>		
Illegal occupation of underground bakehouse ..	..	..
Breach of special sanitary requirements for bakehouse	44	42
Other offences	2	2
Total	107	73

3.—HOME WORK.

	OUTWORKERS' LISTS, SECTION 107.						
Nature of Work.	Lists received from Employers.						Notices served on occupiers as to keeping or sending lists (8)
	Sending twice in the year.			Sending once in the year.			
	Lists. (2)	Outworkers.		Lists. (5)	Outworkers.		
		Con-tractors (3)	Work-men (4)		Con-tractors (6)	Work-men (7)	
WEARING APPAREL :							
(1) Making, etc. . .	40	10	162	2	2	3	16
(2) Cleaning, etc. . .	..	..	..	..	..	..	..

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Workshops	331
Bakehouses	122
Domestic Workshops (not Outworkers)	9
Total Number of Workshops on Register	462

5.—OTHER MATTERS.

Class.	Number.
<i>Matters Notified to H.M. Inspector of Factories :—</i>	17
Failure to affix Abstract to the Factory and Workshop Act (s. 133) ..	2
Notified by H.M. Inspector	16
Report (of action) sent to H.M. Inspector	8
<i>Underground Bakehouses (s. 101) :—</i>	
Certificates granted during the year .. .. .	..
In use at the end of the year	5

TRADES FOR WHICH REGISTERED WORKSHOPS ARE USED.

Dressmaking	39	Joiners	5
Boot Repairing	38	Cycle Repairers	5
Clogging	29	Tripe Dressers	2
Tailoring	42	Marine Store Dealers	5
Millinery	49	Coffin Maker	1
Clothing	17	Ginger Beer Works	1
Saddlers	5	Clay Pipe Maker	1
Jewellers	5	Hard Confectionery	2
Plumbers	14	Mantle Making	4
Painters	8	Bottlers	4
Shoeing Smiths	6	Rope Walker	1
General Smiths	1	Coach Builders	3
Wheelwrights	5	Tin-plate Workers	6
Cabinet Makers	4	Tarpaulin Sheet	
Ice Cream Makers	2	Manufacturers	1
Scale Repairers	2	Carver	1
Laundries	2	Watch Repairers	3
Knitting	2	Piano Repairer	2
Picture Framers	3	Upholsterer	2
Wreathes	2	Monumental Mason	1
Electrical Works	1	Basket Maker	1
Waste Paper Dealer	1	Cigarette Maker	1
Pickle Works	1		
Coopers	1		
		Total	331

NUMBER OF WORKS ON REGISTER.

1919.	1920.	Increase.
320 ..	331 ..	11

NUMBER OF DOMESTIC WORKSHOPS ON REGISTER.

1920	1919	1918	1917
9 ..	8 ..	10] ..	14

FACTORY AND WORKSHOP ACT, 1901.

Notices received from H.M. Inspector	..	..	..	..	16
Section 5—Sanitary defects	..	..	..	..	50
Complied with	..	..	..	..	18

NUMBER OF BAKEHOUSES ON REGISTER

1919	1920	Increase.
116	122	6

Nine are certified underground bakehouses, and are as follows :—

22, Earl Street.	36, Wigan Lane (<i>not in use</i>).
32, Market Street.	108, Wallgate (<i>not in use</i>).
58, Market Street.	12, Wallgate (<i>not in use</i>).
10, Standishgate.	Woodcock Street (<i>not being used as</i>
34, Wigan Lane	<i>bakehouse</i>).

OUTWORKERS' LISTS (SECTION 107).

No. of Visits to Outworkers' Premises	..	..	..	26
„ Nuisances arising	..	..	..	—

SHOP HOURS ACT, 1892–1905.

SHOP ACTS, 1912 AND 1913.

The work done under this Act is given fully in the Chief Sanitary Inspector's report. The infringements were complied with upon warning from the Inspectors.

INFRINGEMENTS.

Notices not exhibited	..	..	..	..	..	5
Other infringements	..	..	..	..	..	4
						—
						9
No. of Observations (day)	..	..	..	..	..	—
„ „ (night)	..	..	..	..	..	7
„ Visits (day)	..	..	..	..	..	5

SLAUGHTER-HOUSES AND MEAT INSPECTION.

There are 24 registered slaughter-houses in the Borough, and 1 licensed slaughter-house. Most of these slaughter-houses are unsatisfactory, and in default under the Bye-laws. They are generally in close proximity to dwellings, but unfortunately cannot be closed on this account. Many of them are ill-paved, improperly drained, and insufficiently lighted. The middens in connection with the slaughter-house constitute a serious nuisance, and as breeding-places for flies constitute a real danger to health.

The Health Committee has enforced more strictly the provisions of the Public Health Acts, and the Local Bye-Laws, that deal with the re-

moval of manure, as it is obvious that these breeding-places for flies cannot be allowed to remain unchecked.

The fact that the work of slaughtering is distributed among 25 slaughter-houses in different parts of the Borough renders the work of meat inspection difficult. It is to be hoped that in the near future the provision of the Municipal Abattoir already decided upon by the Council may be accomplished. At present, however, no definite steps have been taken for various reasons, but a Sub-Committee has been appointed to endeavour to find a suitable site.

Cases of Tubercular or other disease in meat are reported to the Health Department by the butchers, and are then examined by Inspectors, who refer doubtful cases to your Medical Officer.

Independently, the slaughter-houses are regularly visited by the Inspectors and any suspicious carcasses found are reported to the Medical Officer.

Particulars of meat and other foodstuffs surrendered and destroyed will be found in your Chief Sanitary Inspector's report.

DAIRIES, COWSHEDS, AND MILKSHOPS ORDER.

REPORT OF THE VETERINARY INSPECTOR UNDER THE DAIRIES AND COWSHEDS ORDER FOR THE YEAR 1920.

28, STANDISHGATE,

Wigan.

Gentlemen,

During the past year I have not discovered any case of tuberculosis of the udder amongst the milch cows in the borough and very few of tuberculosis of the lungs. This I attribute to some extent to the high price of milking cows causing greater care in purchasing and also I am pleased to say to a better realisation of the danger of introducing unthrifty speculative animals into a herd of healthy milking stock. Doubtless the newspaper reports from time to time of the proceedings of the committee on the Production and Distribution of Milk, and also the Milk and Dairies Bill, which is very closely connected with it, have caused them to ponder seriously over the prospects and probable character of the coming legislation. The Committee was appointed in 1917, and its final report is a very extensive and masterly one and deals with milk from the time it leaves the cow and even before, until the time it is in the hands of the consumer. It also deals with the various branches of the milk industry, milking machines, and accounts in connection with the production of milk.

On page 16 of the report, Clause 65, the Committee advise that financial assistance should be given if possible towards the improvement of the existing buildings and the erection of new ones. This opens up a very large question. It has been estimated that 50,000,000 pounds would be required to put the cowsheds of this country into a proper sanitary condition, and it is not explained in the report why the owners of cowsheds should be subsidised to

this extent to put their property in a sanitary condition when the landlords in those towns like our own which have years ago adopted the provisions of The Dairies and Cowsheds Order were all compelled to make the necessary alterations at their own expense.

A further recommendation is that facilities should be provided out of public funds for free tuberculin testing provided the Owner can supply satisfactory evidence that he has reasonable facilities for carrying out these tests, and is willing to comply with the necessary conditions laid down for freeing his herd. Such a herd to be recognised as tubercle free and a certificate given to the effect that the herd was tested on a particular date, and found free and will be subject to retesting periodically. The conditions will not be easy to carry out in the towns as the first necessity is absolute separation of the reacting from the non-reacting cows. This will almost of necessity require separate buildings, and in the case of farms where cattle are turned out to graze separate pastures, with regard to the disposal of reactors, there is only the suggestion that the owner should be advised as to the best method of disposal.

This leaves to the owner the power to think for himself, and I am inclined to think that from a selfish point of view, his best plan would be to sell his reactors and buy tested cows regardless of the damage to some other herd. I am strongly of opinion that it will be found advisable to brand all cows which have reacted so that a purchaser may be warned of what he is buying.

By this Milk Bill it is made a penal offence for a Dairyman to sell or offer for sale the milk of any cow which had given tuberculous milk, or was suffering from emaciation due to tuberculosis, from tuberculous of the udder, from acute inflammation of the udder, or any of the diseases specified in the second Schedule of the act; these are Actinomycosis of the udder, Anthrax, Foot and Mouth Disease, Suppuration of the udder, or any other disease affecting cows, which by a milk and dairies order is declared to be a disease for the purpose of the Act. It is also said in section 5 that a person shall be guilty of an offence if it is proved that he had previously received notice from an Officer of a local authority, or that he otherwise knew or by the exercise of ordinary care could have ascertained that the cow had given tuberculous milk, or was suffering from any such disease.

I have dealt at considerable length with the coming legislation because if it is made too drastic it may possibly alter the whole question of milk production in this country, and might easily lead to a considerable curtailment of the supply.

For these reasons I have thought it proper to mention the matter in my report.

My experience leads me to the conclusion that the personal element has more to do with the cleanliness of the milk supply than even the most hygienic cowshed, and that much of the contamination occurs after the milk has reached the consumer. The only cure for this appears to be the delivery of milk in bottles, and I am pleased to know that Alderman O'Donohue is preparing to do this at his new farm in the country. I hope the Alderman will go carefully into the question of the extra cost, if any, this entails, because if only nominal, which I am led to believe, it would be of immense benefit to the cleanliness of the milk supply.

In conclusion I should just like to mention some very promising experiments of Prof. Calmette, in France, by which he appears to have been successful in immunizing cattle against Tuberculosis. The French Government is so impressed with the value of these experiments that they have placed an Island in the South Seas at his disposal that he may continue his experiments on anthropoid apes. It is possible that here we have the greatest discovery of the century in the stamping out of Tuberculosis.

Yours obediently,

WM. WOODS.

No. of houses in respect of which Closing Orders were still operative on January 1st, 1920	..	..	..	..	..	88
No. of Demolition Orders made, and not complied with, on January 1st, 1920	..	..	..	..	..	35
No. of houses in respect of which Demolition Orders remained operative on December 31st, 1920	..	..	..	..	..	35
No. of houses in respect of which no Orders have been made remaining on books December 31st, 1920.	..	..	..	..	..	99
No. of houses in respect of which Closing Orders remained operative on December 31st, 1920	..	..	..	..	..	81
The number of houses made habitable during the year is..	..	..	..	..	..	8
The number of back-to-back houses converted into through houses is	..	..	..	..	..	2

The following table shows the number of houses reported to the Committee, the number of Closing Orders made, and the number of houses demolished in each year since the passing of the Housing and Town Planning Act, 1909 :—

	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Houses reported	8	32	42	281	97	162	29	..	7	73	31	..
Closing Orders	5	14	13	245	83	83	39	11	..	12	24	..
Houses demolished	5	13	..	14	23	2	13	12	5	..	..	..

UNPAVED YARDS AND PASSAGES, &c.

The following have been dealt with for defective surfaces of yards and passages :—

5, Albert Street.
 178, Billinge Road.
 5, Crofter's Arms Yard.
 13-15, Cowling Place.
 16, Douglas Street P.
 9-15, Every Street.
 135, Frog Lane.
 123, Gidlow Lane.
 7, Kendal Street.
 2-4, Low Street.
 59, Lorne Street.
 38-40, Lime Street,

58, Lower Morris Street.
 5, Mint Court.
 18, Oxford Street.
 Royal George Lodging House.
 43, Swan Street.
 17, Turner Street.
 24, 30, 32, Tipping Street.
 69, Upper Morris Street.
 2, William Street.
 38, Victoria Street.
 89, 358, 355, Warrington Road.
 22, Westminster Street P.

REMOVAL OF NIGHTSOIL, &c.

The Borough Surveyor has kindly supplied me with the following particulars :—

	T.	C.	Q.
House refuse collected in Borough from January 1st to December 31st, 1920	24931	3	3
Pails excreta removed in 1920	6717	17	1
Midden and Ashpit Refuse removed in 1920	9367	1	1
Number of Pail Closets in Borough	7140		
Number of Pails collected in 1920	407486		
	£	s.	d
Cost (including washing and distribution)	5796	8	10
Cost of Collecting Ashes during 1920	8073	18	3
Cost of Collecting Midden and Ashpit Refuse during 1920	2930	14	1
Number of privy middens in Borough	1579		
„ „ „ emptied, 1920	10915		
Number of new houses erected in 1920	7		
„ water closets in Borough to March 31st, 1921	7807		

MIDDENS, ASHPITS AND CESSPOOLS.

Year.	ABOLISHED.			RE-CONSTRUCTED.		
	Middens.	Ashpits.	Cesspools.	Middens.	Ashpits.	Cesspools.
1905	7	..	..	5	..	..
1906	6	..	..	2	..	..
1907	4	..	..	3	..	..
1908	6	..	1	3	..	..
1909	5	1	..	15	3	..
1910	1	..	..	2	..	..
1911	11	..	..	32	3	..
1912	7	..	..	16	3	..
1913	9	1	..	7	1	..
1914	14	3	..	..	5	..
1915	12	3	..	12	3	..
1916	6	..	..	2	..	..
1917	2	..	..	..	..	..
1918	1	..	..	1	..	..
1919	2	..	..	1	..	..
1920 .. ..	..	1	..	5	..	..
Total ..	94	9	1	109	18	..

Middens 203 demolished or re-constructed.
 Ashpits 27 „
 Cesspools. 1 „

CONVERSION OF CLOSETS.

Middens or pail closets converted into water closets in each of the following years :—

1904	..	..	..	..	8	1912	..	..	..	..	44
1905	..	..	..	..	28	1913	..	..	..	..	47
1906	..	..	..	..	23	1914	..	..	..	..	62
1907	..	..	..	..	23	1915	..	..	..	..	99
1908	..	..	..	..	21	1916	..	..	..	..	42
1909	..	..	..	..	60	1917	..	..	..	..	9
1910	..	..	..	..	5	1918	..	..	..	..	10
1911	..	..	..	..	86	1919	..	..	..	..	13
						1920	..	..	..	..	18
Total					..	..	..	..	..	..	601

OFFENSIVE TRADES.

These have been kept under close supervision, and certain improvements and alterations that were urgently necessary, have now been carried out. There have, in consequence, been few complaints of nuisance since.

RAINFALL, 1920.

AT WORTHINGTON.

Month.					Rainfall in inches and Tenths.	No. of days on which rain fell, being .01 of an inch or more.
January	..	..	..	..	3.94	22
February	..	..	..	..	2.99	16
March	..	..	..	..	4.14	23
April	..	..	..	..	5.49	29
May	..	..	..	..	6.85	20
June	..	..	..	..	2.77	14
July	..	..	..	..	6.92	30
August	..	..	..	..	2.74	15
September	..	..	..	..	3.65	15
October	..	..	..	..	1.25	8
November	..	..	..	..	1.65	14
December	..	..	..	..	3.03	18
Total					45.42	224

The mean average rainfall for the past 63 years, 37.64 inches.

RAINFALL, 1920.

AT BISPHAM.

Month.	Rainfall in inches and Tenths.	No. of days on which rain fell, being .01 of an inch or more.
January	3.92	20
February	3.06	13
March	3.72	22
April	5.51	26
May	6.07	17
June	3.17	11
July	7.23	26
August	2.78	13
September	4.06	17
October	1.23	9
November	1.53	11
December	2.84	15
Total	45.12	200

Average consumption per head per day, Wigan and Pemberton (estimated population, 86,114) was 22.50 gallons.

THE CLIFF,
Higher Broughton,
Manchester.

March 31st, 1921.

To the Chairman and Members of the Health Committee, Wigan.

GENTLEMEN,

REPORT OF THE PUBLIC ANALYST FOR THE YEAR 1920.

I have much pleasure in placing before you a brief account of the work carried out under the various Acts, during the year 1920.

During the year I have analysed 140 samples of foods and drugs as enumerated in the following table:—

Articles.	Milk	Margarine	Coffee	Epsom Salts	Boric Ointment	Mercury Ointment	Sugar	Borax	Butter	Tea	Cheese	Total.
Number	112	7	5	3	3	3	2	2	1	1	1	140
Number Adulterated.	17	—	—	—	—	2	—	—	—	—	—	19

Of the 112 milks examined 17 (equal to 15·1 per cent.) were reported against. Of these, ten were deficient in fat to the extent of 5·0 (two cases), 8·3, 10·0, 11·6, 12·3, 13·3, and 18·0 (two cases) per cent. respectively, and seven contained extraneous water in the proportions of 2·3, 2·7, 7·1, 7·4, 8·0, 8·2 and 8·7 per cent. respectively.

All samples were examined for preservatives with wholly negative results. The following table illustrates the quality of the milk supply, judging by the fat content.

Milks containing under 3·0 per cent. of fat	10	or 8·9 %.
„ „ 3·0 % fat not over 3·5 %	25	„ 49·1 %.
„ „ 3·6 % fat not over 4·0 %	28	„ 25·0 %.
„ „ Over 4·0 %	19	„ 16·9 %.

The two remaining adulterated samples were Mercury Ointments.

The British Pharmacopœia directs that the ointment shall be so compounded as to contain 30·0 per cent. of mercury. The two samples in question contained only 10 and 15 per cent. respectively, and were therefore deficient in the active medicinal principle to the extent of 50 and 66·6 per cent.

The remaining drugs conformed to the requirements of the British Pharmacopœia.

Chemically and Microscopically the coffees were genuine, whilst the remaining samples were of satisfactory commercial quality.,

FERTILISERS AND FEEDING STUFFS ACT.—Under this Act 9 samples were analysed, of which 7 were satisfactory and 2 unsatisfactory.

WATER SUPPLY.—During the year 13 samples of the Corporation (Wigan and Pemberton) water supply have been examined. The two samples taken in June record the highest “Albuminoid Ammonia” figure, and also the unusual feature of heavy traces of suspended matter, the most probable cause of which was the breaking down of deposit in the pipe.

The remaining samples were of such quality as to suggest a perfectly satisfactory organic stability and the supply generally may be said to maintain its excellent reputation.

Whilst expressing my appreciation of the willing and helpful co-operation at all times, of the Medical Officer of Health and his staff, I desire to record my sorrow and regret at the loss which the Department has suffered by the death of the late Chief Inspector, Mr. C. H. France, who was held in high esteem by all his colleagues.

I am,

Yours faithfully,

S. ERNEST MELLING.

ANNUAL REPORT
OF THE
CHIEF
SANITARY INSPECTOR

1920.

ANNUAL REPORT of the CHIEF SANITARY INSPECTOR 1920.

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HEALTH DEPARTMENT,

Library Street,

Wigan,

May, 1921.

To the Chairman and Members of the Health Committee.

Lady and Gentlemen,

I beg to submit the Ninth Annual Report of the late Mr. Charles H. France, whose death occurred suddenly within a few days of the end of the year.

On behalf of the staff I desire to record their great respect for the late Chief Sanitary Inspector, especially with reference to his kindly, courteous, and tactful manner in which he always directed and supervised the work of the department, and in consequence greatly assisted the staff in carrying out duties which were often of difficult and unpleasant character.

I am,

Lady and Gentlemen,

Your obedient Servant,

FREDERICK MARTLEW,

Chief Sanitary Inspector.

NUISANCES.						1919.	1920.
Houses and premises inspected and visited <i>re</i> nuisances							
and complaints	..	..	..	..	..	1714	2769
Nuisances discovered	..	..	..	..	..	2164	3267
Nuisances abated	..	..	..	..	..	1022	2742
Notices issued (preliminary)	..	..	..	..	..	922	1220
„ „ (formal)	..	..	..	..	..	535	899
Re-visits to nuisances	..	..	..	..	..	3254	6265
Other visits made	..	..	..	..	..	1681	1085
Visits to premises (testing of drainage)	..	..	..	..	..	43	109
Letters issued <i>re</i> nuisances	..	..	..	..	..	264	457
Nuisances remaining on books, December 31st, 1920						1952	648

DESCRIPTION OF NUISANCES DEALT WITH.

Defective drainage	..	..	..	..	..	29	62
Choked drainage	..	..	..	..	..	209	259
Defective and foul gullies	..	..	..	..	..	21	16
Gullies requiring grids	..	..	..	..	..	6	4
Want of slopstones and pipes	..	..	..	..	..	10	18
Slopstones and slopstone pipes defective	..	..	..	..	..	47	97
Soil pipes or connections defective	..	..	..	..	..	5	3
Defective or choked water closets	..	..	..	..	..	57	48
Defective water supply to closet	..	..	..	..	..	7	—
Defective sink waste pipes (connected to drains)	..	..	..	..	..	1	3
Defective condition of closets (roof, walls, door, seat, or floor)	..	..	..	..	..	91	143
Want of doors to closets	..	..	..	..	..	8	12
„ „ ash-house	..	..	..	..	..	12	53
Defective condition of ash-houses (roof, walls, door or floor)	..	..	..	..	..	39	33
Defective or choked waste water closets	..	..	..	..	..	28	33
Houses with defective floors	..	..	..	..	..	57	114
Defective water supply to houses	..	..	..	..	..	1	1
Want of ash tubs	..	..	..	..	..	14	1
Workshops require limewashing	..	..	..	..	..	3	3
Defective water closet cisterns	..	..	..	..	..	34	34
Slopstone pipes connected to drain	..	..	..	..	..	2	—
Insufficient and Want of closet accommodation to houses or Workshops	..	..	..	..	..	3	20
Defective spouts (eaves or down)	..	..	..	..	..	282	524
Want of spouting to premises	..	..	..	..	..	19	14
Defective roofs	..	..	..	..	..	271	681
Defective flagging or paving (yards and passages)	..	..	..	..	..	30	52
Houses overcrowded or keeping of lodgers	..	..	..	..	..	7	10
Houses and premises filthy	..	..	..	..	..	25	12
Houses with filthy closets	..	..	..	..	..	6	6
„ filthy yards and entries	..	..	..	..	..	12	9
„ damp and defective walls	..	..	..	..	..	226	240
Defective middenstead	..	..	..	..	..	7	18
Want of middensteads	..	..	..	..	..	1	6
Accumulations of manure	..	..	..	..	..	17	21
„ rubbish	..	..	..	..	..	12	14
Keeping of animals	..	..	..	..	..	20	26
Miscellaneous	..	..	..	..	..	316	674

Conversions have been carried out in the following properties from privies and pails to water closets :—

1 and 3, Whelley, 2 pail closet to 2 water closets.

14, 16, 18 and 20, Hopwood Street, privy closets to water closets.

Yard, Soho Street, 2 privy closets to 2 water closets.

2 to 6 and 7a, Crompton Street, 2 pail closets to 2 water closets.

COMMON LODGING HOUSES.

No. of common lodging-houses in the Borough	..	..	13
„ lodgers allowed nightly	..	..	496
„ visits by day	..	..	611
„ „ night	..	..	31
„ lodgers reported as being received (per returns)	..	151,028	
„ letters sent out	..	..	2
„ houses on register end of 1919	..	..	13
„ houses given up during the year	..	..	—
„ houses remaining on register end of 1920	..	13	

HOUSES LET-IN-LODGINGS.

No. of houses on register	..	..	..	..	17
„ visits by day	..	..	..	..	52
„ letters sent out	..	..	..	..	—

SLAUGHTER-HOUSES, OFFENSIVE TRADES, AND MARKETS.

No. of slaughter-houses in the Borough registered	..	24
„ „ „ licensed	..	1
„ offensive trade premises in the Borough	..	7
„ knackers' yards in the Borough (licensed)	..	2
„ visits to slaughter-houses	..	1558
No. of visits to offensive trade premises	..	75
„ „ markets	..	341
„ „ butchers and other food shops	..	426
„ letters sent out	..	6
„ certificates issued (condemned food)	..	332

The following animals were examined as to their fitness for sale :—

	Passed.	Condemned.	Part passed and part condemned.
Beasts ..	229	43	27
Sheep ..	1	9	1
Pigs ..	—	6	—

FOOD CONDEMNED, 1920.

No. of Beasts condemned	..	..	..	..	43
„ Beasts of which a portion was condemned	..	..	..	..	27
„ Sheep condemned..	..	..	..	..	7
„ Lambs	..	..	..	..	2
„ Pigs	..	..	..	..	6
„ Pigs of which a portion was condemned	..	..	..	..	1
„ Calves condemned	..	..	..	..	1
Beef: 4 Forequarters and 6 Hindquarters; 2 Buttocks and 1 Clod.					
Frozen Lamb and Mutton	..	..	..	..	1211lb.
Bacon	..	..	..	..	177lb.
Hams..	..	..	..	..	3
Tinned Meat	..	..	..	..	15 tins.
Rabbits	..	..	..	..	5075
Eggs	..	..	..	..	1073
Butter	..	..	..	..	364lb.
Cheese	..	..	..	..	85lb.
Dry Fish	..	..	..	..	198 boxes.
Wet Fish	..	..	..	..	80 boxes.
Shell Fish	..	..	..	..	2 bags.
Tinned Fish..	..	..	..	..	25 tins.
Ducks	..	..	..	..	31
Fruit: 84 tins, 162 boxes, 40 baskets, 40 bags and 37 pots.					
Lettuce	..	..	..	..	39 crates.
Tomatoe Sauce	..	..	..	..	1 bottle.
Condensed Milk	..	..	..	..	121 tins.
Confectionery: 16 pies and 2 slab cakes					

The following statement shows the quantities of unwholesome food and shellfish and other refuse destroyed at the Miry Lane Depot during the year :

	T.	C.	Q.
Beef	25	12	0
Pork	0	15	2
Fish	11	5	2
Fish Refuse and Shell Fish	61	11	2
Sundry Refuse	248	6	2
	347	11	0

CANAL BOATS ACTS, 1877 AND 1884.

A census was taken at the end of the year of the boats that have been

registered at Wigan, as to how many were still in use or otherwise. The result of the enquiries is given below:—

No. of Boats that have been registered at Wigan..	..	295
„ still in use or available..	.... ..	39
„ not in use .. ..	.. ..	23
„ broken up .. ..	.. ..	111
„ that cannot be traced, sold, or dispensed with		83
„ re-registered with other Authorities ..	..	15
„ re-registered at Wigan .. ..	.. ..	18
„ registered but not legally required ..	..	6
„ Applications for registration and re-registration during the year .. ..	.. ..	—
„ Applications granted .. ..	.. ..	—
„ Boats re-registered .. ..	.. ..	—
„ Inspections .. ..	.. ..	127
„ Notices issued .. ..	.. ..	9
„ Notices complied with .. ..	.. ..	9
„ Contravention of regulations .. ..	.. ..	11
„ Letters sent out .. ..	.. ..	22
„ Certificates renewed.. ..	.. ..	—

Copy of the Annual Report to the Ministry of Health as to the execution of the Canal Boats Acts during 1920 :

1. INSPECTION OF BOATS.

The inspection was undertaken by Mr. C. H. France, Chief Sanitary Inspector, Wigan. Remuneration reckoned in salary.

2. NUMBER OF BOATS INSPECTED.

127. Condition of Boats and Occupants, good.

3. INFRINGEMENTS OF THE ACTS AND REGULATIONS.

Certificates require renewing	1
Certificates not produced	5
Markings	1
Leaky Cabins	3
Certificate did not identify owner and boat	1

4. LEGAL PROCEEDINGS.

None taken.

5. STEPS TAKEN TO SECURE COMPLIANCE WITH ACTS AND REGULATIONS.

Notices and letters issued in each case.

6. CASES OF INFECTIOUS DISEASE.

None.

7. DETENTION OF BOATS FOR CLEANSING AND DISINFECTION.
None.

8. TOTAL NUMBER OF BOATS ON REGISTER.

Total Registered	..	..	..	..	..	..	295
No. of Boats still in use or available	..	..	..	..	..	..	39
„ not in use	..	..	..	..	..	..	23
„ broken up	..	..	..	..	..	..	111
„ that cannot be traced, sold, or dispensed with	..	..	..	..	..	..	83
„ re-registered with other Authorities	..	..	..	..	..	..	15
„ re-registered at Wigan	..	..	..	..	..	..	18
„ registered, but not legally required to be	..	..	..	..	..	..	6

9. NUMBER OF BOATS REGISTERED IN 1920.
None.

(Signed), FREDERICK MARTLEW,
Chief Sanitary Inspector.

SMOKE NUISANCES.

During the year 29 smoke observations have been taken. In three instances the time limit was exceeded. Warning letters were sent to the persons responsible for the nuisances.

INFECTIOUS DISEASES (PREVENTION) ACTS, &c.

The work in this branch, though not so heavy as in former years, has required a daily administration. The disinfecter has continued to do good work and the improvements made in the previous year have merited the expense thus incurred.

Library books from infected houses have been secured by the Department, disinfected and returned direct to the Library, with the information that such book or books have been disinfected, except in such cases where the Medical Officer of Health has directed the destruction of any book.

No. of houses disinfected	..	..	..	..	..	468
„ rooms disinfected	..	..	..	..	..	644
„ beds disinfected	..	..	..	..	..	513
„ mattresses disinfected	..	..	..	..	..	188
„ sheets and quilts disinfected	..	..	..	..	..	1186
„ other articles disinfected	..	..	..	..	..	2592
„ premises cleansed and limewashed after infectious disease	..	..	..	..	..	224
„ visits to houses <i>re</i> limewashing and cleaning, &c.	..	..	..	..	..	429
„ „ „ infectious disease	..	..	..	..	..	1226
„ letters sent out <i>re</i> infectious disease	..	..	..	..	..	10
„ „ „ limewashing	..	..	..	..	..	58
„ library books disinfected	..	..	..	..	..	66

SALE OF FOOD AND DRUGS ACTS ; MARGARINE ACTS ;
PUBLIC HEALTH (MILK & CREAM) REGULATIONS, 1912 & 1917.

All the samples were submitted to the Public Analyst.

Milk.—Samples were obtained from shops, railway stations, and milk carts. In cases of adulteration, further samples were obtained from the farmer, the farms visited, and all appliances, etc., carefully inspected. Every sample was examined by the Public Analyst for preservatives.

No. of samples obtained for analysis	..	..	..	144
„ „ genuine	..	..	..	124
„ „ adulterated	..	..	..	20
„ „ (informal)	..	..	..	16
„ letters sent out	..	..	..	56
„ samples obtained (not sent for analyses)			..	—

PUBLIC HEALTH (MILK & CREAM) REGULATIONS, 1912 & 1917.

*New
Milk. Cream.*

1.—MILK AND CREAM NOT SOLD AS PRESERVED CREAM.

No. of samples examined for the presence of a preservative	..	..	..	..	116	..	—
No. in which a preservative was reported to be present	..	..	..	..	..	—	—

Article.	Samples.	Genuine.	Adulterated	Not Formal.
Milk	116	99	17	5
Margarine ..	7	7	—	—
Coffee	5	5	—	—
Sugar	2	2	—	—
Tea	1	1	—	—
Cheese	1	1	—	—
Butter	1	1	—	1
Epsom Salts ..	3	3	—	3
Mercury Ointment ..	3	—	3	3
Boric Ointment ..	3	3	—	3
Borax	2	2	—	2
Totals	144	124	20	17

COUNTY BOROUGH OF WIGAN.
PARTICULARS OF SAMPLES OF FOODS AND DRUGS TAKEN FOR THE PURPOSE OF ANALYSIS
DURING 1920.

<i>Articles.</i>	<i>No. of Samples</i>	<i>Formal.</i>	<i>Informal.</i>	<i>Appeals to Cow.</i>	<i>Preser- vatives present.</i>	<i>Genuine.</i>	<i>Adulterated or Deficient.</i>	<i>Action taken.</i>
Cream ..	116	93	5	18	—	99	17	— Six persons were warned. Two persons were fined ; one £20, one £1 and costs
Milk ..								
Margarine : ..	7	7	—	—	—	7	—	One sample contained a maximum amount of water.
Coffee ..	5	5	—	—	—	5	—	—
Sugar ..	2	2	—	—	—	2	—	—
Tea ..	1	1	—	—	—	1	—	—
Cheese ..	1	1	—	—	—	1	—	—
Butter ..	1	—	1	—	—	1	—	Sample was rancid on arrival at Laboratory.
Epsom Salts ..	3	—	3	—	—	3	—	—
Mercury Ointment..	3	—	3	—	—	—	2 and one was mis-described and consisted of metallic mercury. Two were below B.P. standard	—
Boric Ointment ..	3	—	3	—	—	3	—	—
Borax ..	2	—	2	—	—	2	—	—
Totals ..	144	109	17	18	—	124	20	

PARTICULARS OF ADULTERATED OR DEFICIENT FORMAL SAMPLES.

SHEWING ACTION TAKEN.

<i>Sample No.</i>	<i>Deficiency or Adulteration.</i>	<i>Action Taken.</i>	<i>Remarks.</i>
17 18 29	5 % deficient milk fats. 5 % deficient milk fats. 19 % deficient milk fats.	Warned. Warned. Warned.	Deficiency traced to sickness in cowshed. Two appeals to cow samples taken and found to be below standard. See Nos. 47 and 48.
42 43 44	8.3 % deficient milk fats. 12.3 % deficient milk fats. 7.4 % added water.	Warned. Warned Prosecuted and fined £1 and costs.	Appeal to Cow Sample pure. Appeal to Cow Sample pure. Appeal to Cow Sample Nos. 82 and 83.
57	74 % deficient non-fatty solids and 8.7 % added water.	Traced to Farmer.	Appeal to Cow Sample Nos. 82 and 83.
62	18 % deficient milk fats.	Traced to Farmer.	Appeal to Cow Sample No. 80. A second sample was pure.
72 75 76 78	2.3 % added water. 8.2 % added water. 8 % added water. 18 % added water.	Warned. Traced to Farmer. Prosecuted and fined £20.	Appeal to Cow Sample Nos. 82 and 83. See result of sample No. 75. Appeal to Cow Samples taken, No. 80, and a second one was pure.

PARTICULARS OF "APPEAL TO COW" SAMPLES.

<i>Sample No.</i>	<i>Deficiency or Adulteration.</i>	<i>Action Taken.</i>	<i>Remarks.</i>
47	10 % deficient milk fats.		Traced to Sickness in Cowshed.
48	13.3 % deficient milk fats.		Traced to Sickness in Cowshed.
82	2.7 % added water.		
83	7.1 % added water.		
80	11.6 % deficient milk fats		

MARGARINE AND MARGARINE CHEESE.

Under the above 12 persons are registered as Wholesale Dealers for 15 premises.

FERTILISERS AND FEEDING STUFFS ACT, 1906.

During the year nine informal samples were obtained.

SAMPLES.

Linseed Cake	...	..	..	..	..	1
Cotton Cake	..	..	..	..	..	1
Dairy Tablets	..	..	..	..	..	1
Locust Bean Meal	..	..	..	..	..	1
Indian Meal	..	..	..	..	..	1
Thirds	..	..	..	..	..	1
Bran	..	..	..	..	..	1
Special Dairy Meal	..	..	..	..	..	1
White African Indian Meal	..	..	..	..	..	1

The Borough Analyst reported that 7 were satisfactory and 2 unsatisfactory.

MISCELLANEOUS VISITS.

Visits to Fair Vans..	..	..	..	..	139
Letters sent out	..	..	..	..	—

FACTORY AND WORKSHOP ACT.

No. of workshops on register	..	..	..	..	..	331
„ bakehouses on register	..	..	..	..	..	122
„ domestic workshops on register	..	..	..	..	..	9
„ visits to outworkers' premises	..	..	..	..	..	26
„ „ factories	..	..	..	..	..	86
„ „ workshops	..	..	..	..	..	360
„ defects dealt with	..	..	..	..	..	107
„ letters sent out	..	..	..	..	..	19
„ underground bakehouses	..	..	..	..	..	5

SHOP ACTS, 1912 & 1913.

No. of shops on register	..	..	..	..	..	2253
„ visits to shops (day)	..	..	..	..	..	51
„ „ (night)	..	..	..	..	..	1
„ „ re Closing Order, barbers and hair-dressers (day)	..	..	..	..	..	—
„ „ re Closing Order, barbers and hair-dressers (night)	..	..	..	..	..	—
„ observations (day)	..	..	..	..	..	—
„ „ (night)	..	..	..	..	..	—
„ letters sent out	..	..	..	..	..	19

REPORT OF OFFICERS, 1920.

Cautioned for not exhibiting Closing Notice	5
---	----	----	----	---

DAIRIES, COWSHEDS, AND MILKSHOPS ORDER.

No. of cowsheds on register	..	..	..	..	..	24
„ dairies on register	..	..	..	..	..	6
„ milkshops on register	..	..	..	..	..	58
„ visits to milkshops	..	..	..	..	..	73

DISEASES OF ANIMALS ACTS.

The provision of these Acts so far as relate to this Department have been given the attention required.

AMERICAN GOOSEBERRY MILDEW (FRUIT) ORDERS, 1912, &c.

The markets have been regularly visited and the fruit shops supervised during the season of this fruit.

RATS AND MICE (DESTRUCTION) ACT, 1919.

Mr. F. G. Bishop was appointed in March, 1920, to devote a portion of his time as Administrative Officer under the above Act.

He reports as follows :—

During the year 1920 the following premises were visited :—

	<i>Visits.</i>	<i>Re-visits.</i>
Manufacturies	28	60
Dwelling Houses	59	41
Shops, Stables and other premises	186	164

During Rat Week which was held in November an extensive campaign to exterminate rats was carried out, 2,960 baits were supplied to premises infested with rats and of these 1,147 were taken. In addition 132 rats were killed by other methods.

The result was deemed to be satisfactory on account of the number of baits taken.

During the rest of the year 1,311 baits were laid or supplied to occupiers of premises.

1,695 rats are known to have been killed and others no doubt died from poisoning.

RAG FLOCK ACT,.

Enquiries were made at several manufacturies in the Borough, but in no instance was it found that flocks which come under the above Act were used in the process of manufacture.

RAG FLOCK ACT, 1911.

REGULATIONS, 1912.

The provisions of this Act have been carried out. Samples have been obtained. Following the circular issued by the Local Government Board dated May 26th, 1919, respecting the item "flock manufactured from rags," and drawing attention to the case decided in High Court "Cooper and Smith," I procured four informal samples, 2 each of Carpet Flock and Wool Flock. Carpet Flock was a flock which may be assumed to come within the bearing of the case. The result of analysis I append. It is interesting to note that a sample of Wool Flock contained such a degree of contamination which goes to show that all flock should come within a standard of cleanliness.

Article 1 of the Regulations states: "Flock shall be deemed to conform to the standard of cleanliness for the purposes of Sub-section (1) of Section 1 of the Act when the amount of soluble Chlorine, in the form of Chlorides removed by thorough washing with distilled water at a temperature not exceeding 25 degrees centigrade from not less than 40 grammes of a well-mixed sample of flock, does not exceed 30 parts of chlorine in 100,000 parts of the flock.

	<i>Chlorine (combined as chloride).</i>
	<i>Parts per 100,000.</i>
No. 2 Carpet Flock	18
No. 3 Carpet Flock	42
No. 4 Black Wool Flock	50
No. 5 Brown and Red Wool Flock.. ..	30

Nos. 3 and 4 exceed the standard.

HOUSING AND TOWN PLANNING ACT, 1909.

No. of visits to premises <i>re</i> Housing and Town Planning Act	27
„ re-visits to premises <i>re</i> Housing and Town Planning Act	104
Property reported upon, 1920	31
„ on books, January 1st, 1920	203
Property with C. and D. Orders on, January, 1920.. ..	111
„ Preliminary Notices on, January, 1920	22
„ no Orders on, January, 1920	70
„ Notice (Section 15) on, January, 1920	—
„ Closing Orders on, but not let for human habitation by agreement, January, 1920	—
	<hr/> 203 <hr/>

Made habitable, 1920	..	..	..	..	7
Demolished, 1920	..	..	..	..	—
Made into through houses, 1920	..	..	..	..	—
Not used for human habitation, 1920	..	..	..	..	—
Done away with, but re-construction, 1920	..	..	..	..	—
Converted to outhouse, 1920	..	..	..	..	—
					<hr/> 7
Property still on books, December 31st, 1920	..				227
					<hr/>

PROSECUTIONS, 1920.

- Case 1. January 22, Public Health Act. Non-compliance with notice to abate nuisance. Adjourned for one month. Adjourned a further three weeks. Work done. Payment of Costs.
- Case 2. May 10th. Food and Drugs Acts. Selling to the prejudice of the purchaser one pint of new milk not of the nature, etc., demanded. Fined 20/-; advocate and analysis fees allowed.
- Case 3. July 19th. Public Health Act. Non-compliance with notice to abate nuisance. Adjourned for six weeks. Order made for work to be done. Pay costs and advocate's fee.
- Case 4. August 19th. Food and Drugs Acts. Selling to the prejudice of the purchaser, one pint of new milk not of the nature, etc., demanded. Fined £20.
- Case 5. October. Obtaining free milk by false pretences from Health Department. Fined £5.
- Case 6. November 22nd. Exposing in the shop for sale for human consumption diseased meat. Fined £20.
- Case 7. For aiding and abetting the above offence. Fined £20.
- Case 8. November 29th. Public Health Act. Non-compliance with notice to abate nuisance. Adjourned for a fortnight. Work done. Payment of costs and advocate's fee.

County Borough of Wigan.

Education Department.

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER,

FOR THE

Year ended 31st December, 1920.

Medical Inspection Department.

SUPERINTENDENT SCHOOL MEDICAL OFFICER :

FRED E. WYNNE, B.A., M.B., D.P.H.

ASSISTANT SCHOOL MEDICAL OFFICER :

A. AZIZ, M.B., Ch. B., D.P.H.

SCHOOL NURSES :

MISS M. PLUMPTON AND MISS M. A. BIRCHNALL.

CLERK :

MISS H. W. TURNER.

County Borough of Wigan



Education Committee

THE MAYOR (Alderman E. YATES).

Councillor A. E. BAUCHER (*Chairman*).

Councillor A. GUEST (*Vice-Chairman*).

Aldermen : William H. Angus, Matthew Benson, John Cheetham, Richard T. Fletcher, Alexander S. Hilton, James O'Donahue.

Councillors : Robert Alstead, Walter Atherton, Richard Bamford, James Cavey, John Counsell, Henry Farr, Wm. Glover, Patrick Murphy, G. Burbridge, D. Cowser, J. McCurdy, F. Pagett, T. Smith, T. Holland, Mrs. Hogg, Matthew Carmody, James Walkden, J. E. James.

Miss Elizabeth Berry, Very Rev. Dean O'Donoghue, J. T. Gee, S. C. Laws, J. Heaton. P. J. Garrick, Miss Livesey, Mrs. Matheson, Rev. E. Mayson, Arthur Smith, Dr. G. S. Veitch, Rev. J. Pickthall.

***School Attendance and Medical Inspection
Sub-Committee.***

THOMAS HOLLAND (*Chairman*).

A. GUEST (*Vice-Chairman*).

The Chairman of the Education Committee, (A. E. Baucher), Miss Livesey, W. H. Angus, J. Cavey, M. Carmody, Very Rev. Dean O'Donoghue, P. Murphy, Mrs. Hogg, G. Burbridge, J. E. James, T. Smith, James Walkden, Rev. J. Pickthall.

School Medical Officer's Report.



Sheffield,

May, 1921.

To the Chairman and Members of the Education Committee.

Ladies and Gentlemen,

I beg to report as follows on the Medical Inspection and Treatment of, School Children during the year 1920.

The year has been a somewhat eventful one, and may be considered as inaugurating the period when this work will be placed on something like an adequate footing.

At the beginning of the year Dr. Aziz resigned his work in connection with the Schools, on being appointed Consulting Tuberculosis Officer for the Borough. It was decided to appoint two full-time School Medical Officers, and Dr. Chadwick was appointed. The second position has not yet been filled, but it is the intention of the Committee to appoint a lady. Until this is done it will not be possible to commence the inspection of Secondary Schools.

The number of School Nurses was also increased from two to four, and the Committee were fortunate in securing the services of Nurses Aspinwell and Ball.

What is, perhaps, most important of all, is the fact that the work of Dental Inspection and Treatment has been commenced. Although in three half days per week it is only possible to deal with a small percentage of the cases requiring attention, Mr. Townend has performed most valuable work, which has been greatly appreciated by the parents of those children who have availed themselves of his services. No difficulty has been found in getting children to present themselves for treatment, and there is no doubt that Mr. Townend's kindly and tactful methods have been of great help in this

direction. The connection between dental inefficiency and decay in childhood and the development of disease is so definite that there can be no doubt that the greatest possible development in this work would be soon reflected, in a marked improvement in the health of the school children, and, incidentally, a great saving in the cost of the more or less futile treatment of symptoms after they arise. This is especially so in the case of enlarged cervical glands. Although these are generally infected with tubercle there is little doubt that carious teeth are one of the main gateways of infection, and treatment is both expensive and unsatisfactory. It cannot be in any case carried out in the School Clinic.

Another important source of this trouble is the prevalence of verminous conditions of the head. It is very discouraging to find that fifty years of free education have done nothing to produce a more reasonable public opinion on this subject. Parents who have themselves been "educated" still believe that "nits" can be present in the hair without the existence of "anything living." They also resent the statement of facts as an insult, and accordingly resist treatment. I would suggest that the course of "Nature Study" given in the Schools should include demonstration on the life history of the louse. This would have quite as much educational value as the study of the development of the tadpole, and would have a more practical bearing on the lives of the majority of scholars.

No progress has yet been made with the provision of new premises for the Clinic, though plans have been completed by the Borough Engineer in consultation with myself for the alteration of the premises in Library Street so as to house a properly equipped Clinic.

The Inspection of Code Groups could not be carried out during the year owing to shortage of staff, and the re-examination of cases found to be defective was inadequate from the same cause.

In spite of the inadequate and over-crowded premises the work carried out in the Clinic was again the most satisfactory feature of the year's activities.

I have again to thank Dr. Aziz and Dr. Chadwick for their steady and excellent work in the Schools and Clinic, also Nurses Plumpton, Birchnall, Aspinwell and Ball. Miss Turner has again carried out the very heavy clerical work of the Department in the most admirable way, and Mrs. McQuaid

has never failed to give ungrudging help to the staff in many ways outside of her actual duties as Caretaker.

I have also again to thank Inspector Westmoreland, of the N.S.P.C.C., for his invaluable aid in dealing with many cases of neglect.

Our work has always been facilitated by the co-operation of the Director of Education and his staff, and I take this opportunity of expressing my regret at Mr. Mockler's severance of his long connection with the Department.

As this is the last occasion on which I shall have the honour of submitting this report, I beg to thank the Committee for their confidence in the past.

I am,

Your obedient Servant,

FRED E. WYNNE, M.B., D.P.H.,
Late Superintendent School Medical Officer.

TABLE A.
DEFECTS FOUND AND CASES TREATED.

NAME OF SCHOOL.	Total Number of Defects found.	Referred to Infirmary.	No. obtained Treatment at Infirmary.	Referred to own Doctor.	No. obtained Treatment at own Doctor.	No. referred to Clinic.	No. obtained Treatment at Clinic.	Total Number obtained Treatment.	Tonsils and Adenoids referred for Treatment.	No. obtained Treatment at Infirmary.	Defective Vision referred to Infirmary.	Number obtained Treatment.
St. Patrick's ..	179	132	55	9	6	38	38	99	17	4	115	51
St. Catherine's ..	77	57	17	7	4	13	13	34	19	2	38	15
Whelley ..	24	14	8	—	—	10	10	18	9	6	5	2
St. George's ..	33	18	9	5	4	10	10	23	7	3	11	6
St. John's R.C. ..	28	18	7	6	5	4	4	16	8	3	10	4
St. John's C.E. ..	13	7	3	3	1	3	3	7	1	1	6	2
St. Cuthbert's ..	35	16	7	8	6	11	11	24	7	3	9	4
Sacred Heart..	23	15	3	2	2	6	6	11	7	2	8	1
Presbyterian ..	9	4	2	1	1	4	4	7	4	2	—	—
Poolstock ..	30	21	6	2	1	7	7	14	9		12	3
St. Paul's ..	36	12	7	9	7	15	15	29	4	3	8	4
Pemberton Colliery ..	49	21	8	11	10	17	17	35	10	2	11	6
Worsley Mesnes ..	6	5	3	—	—	1	1	4	1	1	4	2
Beech Hill ..	28	16	8	2	1	10	10	19	11	6	5	2
St. Andrew's ..	40	23	10	6	3	11	11	24	6	3	17	7
National & Blue Coat	38	21	10	6	6	11	11	27	2	—	19	10
St. Michael's ..	36	20	6	12	4	4	4	14	10	2	10	4
St. Joseph's ..	99	61	22	26	13	12	12	47	16	7	45	15
St. Mary's ..	36	19	9	11	7	6	6	22	6	3	13	6
Caroline Street ..	42	20	7	11	6	11	11	24	12	5	8	2
Clayton Street ..	31	12	8	10	6	9	9	23	6	4	6	4
Warrington Lane ..	97	54	24	24	11	19	19	54	19	9	35	15
Wesleyan ..	43	16	9	14	8	3	3	20	10	5	6	4
Marylebone ..	19	7	2	8	6	4	4	12	4	2	3	1
St. Mark's ..	65	40	17	15	11	14	14	42	18	3	22	14
Scot Lane Council ..	43	17	12	17	17	9	9	38	8	2	26	9
Totals ..	1051	656	279	225	146	262	261	687	231	86	452	192

Table *B* gives an analysis of the work done in the Clinic :—

CLASSIFICATION OF CONSULTATION AND TREATMENT
AT SCHOOL CLINIC, 1920.

	Inspection at Clinic.	Treated at Clinic.	Referred to Infirmary.	Obtained Treatm't at Infirmary.	Referred to own Doctor.	Obtained Treatment from own Doctor.	Total Number of Attendances at Clinic.
Enlarged Tonsils, Adenoids and Enlarged Glands ..	150	51	70	43	29	23	311
Ear Disease & Deafness ..	257	238	16	15	3	2	2777
Defective Vision	73	—	73	58	—	—	76
Squint	16	—	16	13	—	—	16
External Eye Disease	384	371	13	12	—	—	4030
Ringworm, Scalp & Body.	138	134	4	3	—	—	4138
Impetigo	774	774	—	—	—	—	6317
Scabies	74	74	—	—	—	—	745
Eczema	14	14	—	—	—	—	168
Other Skin Diseases	126	67	47	46	12	10	871
Tubercular, Lung & General	130	63	30	10	37	19	323
Heart and Circulation ...	15	—	5	4	10	10	33
Verminous Conditions	79	79	—	—	—	—	372
Other Defects	1162	1133	—	—	29	29	7371
Dental Caries	31	24	7	7	—	1	52
Disease of Nose	16	14	2	1	—	—	220
Total Attendance	3439	3036	283	211	120	93	27869

LIST OF SCHOOLS CLOSED DURING YEAR 1ST JANUARY, 1920, TO 31ST DECEMBER, 1920, BY ORDER OF MEDICAL OFFICER OF HEALTH.

<i>School.</i>	<i>Departments.</i>	<i>Reason for Closure.</i>	<i>Date.</i>	<i>For Period.</i>
Sacred Heart R.C.....		Measles.	11th February.	33 days.
St. Andrew's	I.	"	"	"
Beech Hill Council....	J.M.	"	16th February	28 days.
Wesleyan	I.	"	"	"
National and Blue Coat.	"	"	"	"
St. Michael's C.E.	"	"	22nd February.	15 days.
St. Mark's C.E.	"	"	27th February.	11 days.
Warrington Lane Cl...	"	"	"	"
St. Thomas, Clayton St.	"	"	6th March.	16 days.
St. Patrick's R.C.....	J.B.	"	8th March.	21 days.
"	J.G.	"	"	"
Scot Lane Council	J.M.	"	"	"
St. Michael's C.E.	I.	"	9th March.	23 days.
Whelley C.E.	"	"	"	"
St. Joseph's R.C.	"	"	"	"
Caroline Street C.E. ..	"	"	"	"
Worsley Mesnes C.E. ..	"	"	11th March.	21 days.
St. Catharine's C.E. ..	"	"	14th March.	18 days.
St. Andrew's C.E.	"	"	15th March.	17 days.
Sacred Heart	M.I.	"	"	"
Beech Hill Council....	J.M.	"	"	"
Warrington Lane	I.	"	"	"
Wesleyan	"	"	"	"
National and Blue Coat.	"	"	"	"
St. Mark's C.E.	"	"	"	"
St. Partick's R.C.	J.G.	"	29th March.	3 days.
"	J.B.	"	"	"
Scot Lane Council	J.M.	"	"	"
Clayton Street C.E. ..	I.	"	22nd March.	10 days.
St. George's C.E.	"	"	16th March	16 days.
Marylebone C.E.....	"	"	19th March.	13 days.
Warrington Lane	M.	"	22nd March.	10 days.
St. John's R.C.	I.	"	23rd March.	9 days.
St. Mary's R.C.	"	"	26th March	6 days.
St. Catharine's	J.M.	"	15th April.	25 days.
Warrington Lane Cl. ..	I.	"	"	"
St. Patrick's.....	J.B. & J.G.	"	"	"
St. Mary's R.C.	I.	"	14th April.	26 days.
St. John's R.C.	"	"	"	"
St. Cuthbert's R.C.....	"	"	9th June.	19 day .
St. George's C.E.	"	"	"	"
Whelley Branch	"	"	7th June.	14 days.
St. Paul's C.E.	"	"	11th June.	17 days.
St. John's C.E.	"	"	30th August.	14 days.
St. George's C.E.	"	"	23rd August.	7 days.

The only other disease which assumed a markedly epidemic form was Scarlet Fever. Several examinations for suspicious cases and contacts were carried out and all such were excluded. It was not found necessary to resort to school closure on this account.

The following table shows the number of cases and deaths occurring during the year among children of school age.

SCARLET FEVER.

AGES :

	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	Total
No. of Notifications	22	21	17	11	14	11	7	11	6	2	122
No. of Deaths	.. -	-	1	-	-	-	-	-	-	-	1

Statistical Summary.

Total Number of Schools :	Provided	..	..	..	..	..	3
Do.	Non-provided	..	..	..	..	..	24
							—
							27
							—
Accommodation	..	..	..	..	..	..	16,844
Average Attendance	..	..	..	..	..	..	12,791
Number of Children in Deaf, Dumb, and Blind Schools	..	..					14
Do.	Institutes for Mentally Defective Children	..					1
Do.	Industrial and Training Schools	..	..				9
Do.	Institutes for Physically Defective Children						5

LIST OF THE PUBLIC ELEMENTARY SCHOOLS OF THE
BOROUGH WITH THE AVERAGE ATTENDANCE
AND ACCOMMODATION, 1919-1920.

<i>School.</i>		<i>Accommodation.</i>	<i>Average Attendance</i>
SENIOR DEPARTMENTS :—			
St. Andrew's	(Mixed)	407 ..	370
Beech Hill	(Sr. Mixed)	200 ..	203
St. Catharine's	(Sr. Mixed)	401 ..	392
Whelley	(Mixed)	285 ..	272
St. Cuthbert's	(Mixed)	200 ..	205
St. George's	(Mixed)	534 ..	458
Marylebone	(Mixed)	98 ..	87
Worsley Mesnes	(Mixed)	190 ..	135
St. John's C.E.	(Mixed)	320 ..	292
St. John's R.C.	(Boys)	319 ..	149
St. John's R.C.	(Girls)	288 ..	124
St. Joseph's	(Boys)	342 ..	309
St. Joseph's	(Girls)	352 ..	286
St. Mark's	(Boys)	322 ..	277
St. Mark's	(Girls)	300 ..	263
St. Mary's	(Boys)	295 ..	186
St. Mary's	(Girls)	295 ..	169
St. Michael's	(Mixed)	368 ..	257
National and B.C.	(Boys)	337 ..	191
National and B.C.	(Girls)	402 ..	222
St. Patrick's	(Sr. Boys)	287 ..	307
St. Patrick's	(Sr. Girls)	337 ..	301
St. Paul's	(Boys)	274 ..	181
St. Paul's	(Girls)	188 ..	142
Pemberton Colliery	(Boys)	319 ..	224
Pemberton Colliery	(Girls)	332 ..	222
Poolstock	(Mixed)	235 ..	239
Sacred Heart	(Mixed)	200 ..	221
Caroline Street	(Mixed)	443 ..	377
Clayton Street	(Mixed)	439 ..	392
Scot Lane	(Sr. Mixed) ...	350 ..	272
Warrington Lane	(Mixed)	463 ..	418
Wesleyan	(Mixed)	330 ..	272
Total		10,452 ..	8,415

LIST OF PUBLIC ELEMENTARY SCHOOLS OF THE
BOROUGH, THE AVERAGE ATTENDANCE, AND
ACCOMMODATION, 1919-1920.

<i>School.</i>	<i>Accommodation.</i>	<i>Average Attendance</i>
INFANTS' DEPARTMENTS :—		
St. Andrew's	215 ..	205
Beech Hill (<i>Junior Mixed</i>)	150 ..	127
St. Catharine's	405 ..	359
Whelley	158 ..	143
St. Cuthbert's	165 ..	152
St. George's	470 ..	316
St. James's, Worsley Mesnes	246 ..	85
St. John's C.E.	260 ..	186
St. John's R.C.	288 ..	80
St. Joseph's	241 ..	206
St. Mark's	222 ..	185
St. Mary's	220 ..	112
St. Michael's	225 ..	109
National and Blue Coat	344 ..	187
St. Patrick's (<i>Junior Boys</i>)	293 ..	228
St. Patrick's (<i>Junior Girls</i>)	376 ..	245
St. Paul's	203 ..	182
Pemberton Colliery	264 ..	184
Poolstock	156 ..	152
Presbyterian	362 ..	89
Caroline Street	191 ..	132
Clayton Street	168 ..	141
Scot Lane (<i>Junior Mixed</i>)	300 ..	160
Warrington Lane	130 ..	120
Wesleyan	143 ..	98
Woodford Street (<i>Junior Girls</i>)	198 ..	193
<hr/>		
Total in Junior Departments	6,032 ..	4,376
Total in Senior Departments	10,452 ..	8,415
<hr/>		
Grand Total	16,484 ..	12,791
<hr/>		

WORK OF SCHOOL NURSES.

During the year the two Nurses have been engaged upon the duties set out in the last report. The growth of the work of the Clinic has kept them fully occupied until after 12 each morning. The rest of their time has been fully taken up in visiting schools with reference to infectious disease, as already described, in general cleanliness inspections, and in "following up" cases at home. The following table gives particulars of their work:—

No. of visits paid to homes <i>re</i> following up of cases	..	1,842
„ cases obtained treatment	.. .. .	759
„ visits paid to schools in connection with general cleanliness	.. .. .	50
„ children inspected <i>re</i> general cleanliness	.. ..	12,814
„ visits paid to schools for re-inspection <i>re</i> general cleanliness	.. .. .	19
„ children re-inspected <i>re</i> general cleanliness	.. ..	1,403
„ visits paid to schools <i>re</i> Infectious Diseases	..	59
children inspected <i>re</i> Infectious Diseases	..	9,273
visits paid to schools for other purposes	..	31
„ visits paid to homes <i>re</i> Infectious Diseases	..	46
visits paid to Schools <i>re</i> Medical Inspection	..	153

TABLE C.

*Schools Medically
Inspected during 1920.*

Schools Medically Inspected during 1920.	No. Examined.	Clothing : Clean, Sufficient	Boots Unsatisfactory.	Nutrition : Abnormal.	Condition, Head.	Condi'n, Body, Vermis, &c.	Adenoids.	Tonsils Enlarged.	Glands Enlarged.	Disease of Nose.	Disease of Ear.	Hearing.	External Eye Disease.	Defective Vision.	Speech.	Heart : Circulation.	Disease of Lungs.	Disease of Nerv's System	Skin Disease.	Tubercle.	Ricketts.	Deformities.	Anæmia.	PREVIOUS HISTORY.								
																								Parents Present.	Measles.	Whooping Cough.	Scarlet Fever.	Diphtheria.	Rheumatic Fever.	Chicken Pox.	Other Diseases.	
St. Patrick's	444	29	25	5	31	17	2	15	5	-	6	1	4	115	-	1	3	-	15	2	1	-	6	110	403	213	95	9	3	375	17	
St. Catharine's	205	4	2	-	6	4	4	9	6	-	3	2	-	38	-	2	2	-	4	-	-	-	3	56	100	56	5	5	-	14	-	
Presbyterian	22	-	-	-	-	-	1	3	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	10	14	9	1	-	4	-	-	
Whelley	100	-	-	-	3	-	1	6	2	1	1	2	-	5	-	1	-	3	-	-	-	-	-	48	58	12	5	1	-	19	-	
Warrington Lane	212	1	-	-	16	1	8	14	3	-	1	1	4	35	-	1	2	10	2	-	-	-	-	45	97	61	11	3	-	24	-	
Marylebone	39	-	-	-	-	-	1	3	5	-	-	-	-	4	-	-	-	-	-	-	-	-	-	4	29	20	4	1	-	14	-	
St. Michael's	94	-	-	-	14	-	4	6	2	-	1	1	-	10	-	1	-	2	-	-	-	1	58	72	18	13	5	-	24	3		
Beech Hill Council	103	-	-	-	3	2	3	5	-	3	1	1	2	8	-	1	1	-	3	-	-	-	-	56	45	25	8	2	-	27	-	
Sacred Heart	50	-	-	-	6	-	2	7	-	-	1	1	1	9	-	-	1	2	2	-	-	-	22	58	26	6	-	-	7	-	-	
St. Andrew's	120	-	-	1	16	-	4	6	-	-	-	-	2	17	-	1	3	-	2	1	-	2	98	107	59	12	2	-	24	1	-	
Wesleyan	85	-	-	-	2	-	2	3	3	-	-	2	-	5	-	-	-	2	1	-	-	-	4	20	69	24	10	2	-	18	1	-
St. John's R.C.	82	-	1	-	5	1	3	9	2	-	2	2	1	6	-	-	-	2	1	-	-	-	2	34	55	26	10	1	-	14	-	-
St. Mary's	82	2	2	-	16	2	8	7	5	-	-	-	2	16	-	-	1	-	4	-	-	-	1	18	48	13	11	1	-	7	-	-
Caroline Street	123	1	-	-	6	2	3	9	4	-	3	4	1	8	-	-	-	-	4	-	-	-	-	27	53	41	16	-	-	12	-	-
St. George's	194	9	4	3	17	9	-	5	4	-	3	-	1	12	-	-	-	-	5	-	-	1	2	41	151	93	12	2	-	87	3	-
St. Joseph's	198	3	5	2	38	4	-	15	6	-	3	4	6	44	-	-	3	-	2	-	-	-	7	18	127	44	15	7	-	43	1	-
Clayton Street	81	-	2	1	6	-	-	6	1	-	2	1	-	6	-	-	2	-	3	-	-	-	1	19	62	21	4	1	-	11	-	-
National	107	-	-	-	6	1	-	2	2	1	-	2	-	14	-	2	1	1	4	-	-	1	35	69	23	8	1	-	16	7	-	-
St. Cuthbert's	95	2	1	-	4	2	5	2	5	-	-	-	5	10	-	-	-	-	7	-	-	1	9	83	19	6	1	-	24	1	-	-
St. John's C.E.	38	-	1	1	2	1	-	1	1	-	-	-	-	6	-	-	-	-	3	-	-	-	3	19	13	4	1	-	21	-	-	-
Pemberton Colliery	162	-	1	-	16	-	2	9	3	-	2	2	5	13	-	2	2	-	-	-	-	-	7	28	83	29	9	2	-	23	-	-
St. Paul's	126	-	1	-	19	2	-	4	5	-	1	4	5	9	-	-	-	-	4	1	-	2	5	99	35	19	1	-	31	2	-	-
Poolstock	91	-	-	-	6	-	1	9	2	-	1	-	3	12	-	-	2	-	3	-	-	-	34	74	29	16	3	-	30	-	-	-
Worsley Mesnes	36	-	-	-	2	1	-	1	2	-	1	-	-	4	-	-	-	1	-	-	-	-	14	35	13	1	-	-	9	-	-	-
St. Mark's	258	1	-	-	5	1	3	14	-	-	4	4	5	22	-	2	1	-	8	1	-	1	46	24	9	2	1	-	7	-	-	-
Scot Lane Council	234	2	1	1	17	2	3	5	4	-	4	4	3	26	1	4	2	-	5	-	-	1	74	158	72	20	-	-	46	1	-	-

PREVIOUS HISTORY.

TABLE OF VERMINOUS CASES
AS FOUND AT GENERAL CLEANLINESS INSPECTIONS.

<i>School.</i>	<i>Total No. Examined.</i>	<i>Pediculi of Head.</i>	<i>Pediculi of Body.</i>	<i>Verminous.</i>
Marylebone	90	4	—	4
National	681	97	31	128
Pemberton Colliery	646	37	14	51
Poolstock	596	39	3	42
Presbyterian	89	5	1	6
Sacred Heart	234	30	4	34
St. Andrew's	610	42	4	46
St. Catherine's	690	94	12	106
St. Cuthkirt's	350	41	4	45
St. George's	869	111	22	133
St. James's, Worsley Mesnes	233	24	3	27
St. John's C.E.	496	59	9	68
St. John's R.C.	380	27	3	30
St. Joseph's	792	71	14	85
St. Mark's	486	69	1	70
St. Mary's	485	64	27	91
St. Michael's	380	20	8	28
St. Patrick's	574	168	31	199
St. Paul's	623	67	20	87
Caroline Street	429	29	17	46
Clayton Street	442	27	5	32
Scot Lane C.	449	65	10	75
Warrington Lane C. ...	556	53	9	62
Wesleyan	648	15	—	15
Whelley	389	23	2	25
Beech Hill C	377	24	—	24
Woodford Street	220	38	6	44
Totals	12,814	1,343	260	1,603

CASES OF INFECTIOUS DISEASE

<i>School.</i>	<i>Dept.</i>	<i>Scarlet Fever.</i>	<i>Diphtheria.</i>	<i>Typhoid Fever.</i>	<i>Measles.</i>
St. Andrew's	M.	—	—	—	9
St. Andrew's	I.	—	—	—	36
Beech Hill	Sr. M.	—	—	—	—
Beech Hill	Jr. M.	25	—	—	—
St. Catharine's	M.	—	—	—	—
St. Catharine's	I.	—	—	—	34
Whelley	M.	5	—	—	2
Whelley	I.	2	—	—	16
St. Cuthbert's	M.	—	—	—	—
St. Cuthbert's	I.	2	—	—	6
St. George's	M.	—	—	—	—
St. George's	I.	1	—	—	45
Marylebone	M. & I.	2	—	—	21
Worsley Mesnes	M.	—	—	—	10 •
Worsley Mesnes	I.	—	—	—	—
St. John's C.E.	M.	15	—	—	—
St. John's C.E.	I.	—	—	—	—
St. John's R.C.	B.	—	—	—	—
St. John's R.C.	G.	—	—	—	3
St. John's R.C.	I.	—	—	—	3
St. Joseph's	B.	—	—	—	—
St. Joseph's	G.	—	—	—	—
St. Joseph's	I.	—	—	—	9
St. Mark's	B.	—	—	—	—
St. Mark's	G.	—	1	—	—
St. Mark's	I.	—	—	—	8
St. Mary's	B.	—	—	—	—
St. Mary's	G.	—	—	—	—
St. Mary's	I.	—	—	—	31
St. Michael's	M.	—	—	—	—
St. Michael's	I.	1	—	—	1
National and B.C. ..	B.	—	—	—	—
National and B.C. ..	G.	—	—	—	—
National and B.C. .	I.	—	—	—	—

NOTIFIED BY HEAD TEACHERS.

<i>Whooping Cough.</i>	<i>Chicken Pox.</i>	<i>Mumps.</i>	<i>Impetigo.</i>	<i>Scabies.</i>	<i>Ringworm.</i>	<i>Miscell- aneous.</i>
—	—	—	—	—	—	—
16	15	—	—	—	—	—
—	—	—	—	—	—	—
—	1	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	1	1	—	—	1
—	2	1	—	—	2	—
7	—	13	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	8	—	—	—	—	—
—	15	—	—	—	—	—
—	—	—	—	—	—	—
22	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
1	—	—	—	—	—	—
—	3	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	30	—	2	—	12	—
—	—	—	—	—	—	—
1	4	—	—	—	—	—
12	16	8	—	—	1	—

CASES OF INFECTIOUS DISEASE

<i>School.</i>	<i>Dept.</i>	<i>Scarlet Fever.</i>	<i>Diphtheria.</i>	<i>Typhoid Fever.</i>	<i>Measles.</i>
St. Patrick's	Sr. B.	—	—	—	—
St. Patrick's	Sr. G.	—	—	—	8
St. Patrick's	Jr. B.	—	—	—	13
St. Patrick's	Jr. G.	7	—	—	27
St. Paul's	B.	—	—	—	—
St. Paul's	G.	—	—	—	—
St. Paul's	I.	—	—	—	5
Pemberton Colliery .	B.	—	—	—	5
Pemberton Colliery .	G.	1	—	—	3
Pemberton Colliery .	I.	9	—	—	82
Poolstock	M.	—	—	—	—
Poolstock	I.	—	—	—	4
Presbyterian	M. & I.	—	—	—	7
Sacred Heart	M. & I.	—	—	—	52
Caroline Street	M.	—	1	1	8
Caroline Street	I.	1	—	—	10
Clayton Street	M.	—	—	—	8
Clayton Street	I.	1	—	—	13
Scot Lane C.	Sr. M.	—	—	—	—
Scot Lane C.	Jr. M.	—	—	—	—
Warrington Lane C.	M.	4	—	—	1
Warrington Lane C.	I.	—	—	—	13
Wesleyan	M.	—	1	—	—
Wesleyan	I.	—	—	—	13
Woodford Street	Jr. G.	—	—	—	—
Totals		76	3	1	506

NOTIFIED BY HEAD TEACHERS.

<i>Whooping Cough.</i>	<i>Chicken Pox.</i>	<i>Mumps.</i>	<i>Impetigo.</i>	<i>Scabies.</i>	<i>Ringworm.</i>	<i>Miscell- aneous.</i>
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
2	—	1	—	—	1	1
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	2	—	—	2	—
—	2	—	—	—	—	—
—	16	6	3	—	1	2
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
13	—	1	—	—	—	—
—	—	—	—	—	—	—
8	—	4	—	—	4	—
—	—	—	—	—	—	—
6	—	—	1	1	1	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
4	—	—	—	—	—	—
—	—	1	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	4
—	—	2	—	1	—	—
82	102	40	7	2	24	8

GRAND TOTAL 831

TUBERCULOSIS IN SCHOOL CHILDREN.

Cases of Tuberculosis of glands, bones, joints, etc., requiring operation can usually only be dealt with at the local Infirmary. They rarely can derive benefit from attendance at an ordinary school until more or less cured. All cases of Tuberculosis of the lungs are handed over to the Tuberculosis Officer of the Borough, who keeps them under observation and gives instructions as to isolation and treatment.

Residential and open-air schools are urgently required for these children.

There are a large number of children in what is known as the "Pre-tuberculous" stage, who might be saved from inevitable disease by the establishment of such schools. Regular attendance in ill-ventilated classrooms is practically a death-sentence for many of these children.

The following particulars as to Tuberculosis in children of school age have been supplied by the Tuberculosis Officer.

TUBERCULOSIS REPORT, 1920.

	From last year, 1919.		Notified.		Improved.		Unchanged.
BOYS.							
Pulm.....	26	..	7	..	29	..	4
Non. Pulm	68	..	7	..	70	..	5
GIRLS.							
Pulm	13	..	7	..	18	..	2
Non. Pulm	28	..	9	..	32	..	5

AREA.—WIGAN COUNTY BOROUGH.

TABLE I.—NUMBER OF CHILDREN INSPECTED,
1919—1920.

(A) CODE GROUPS.

<i>Age.</i>	ENTRANTS.					<i>Other Ages.</i>	<i>Total.</i>
	3	4	5	6			
Boys	—	—	811	—	—	—	811
Girls	—	—	843	—	—	—	843
Totals	—	—	1654	—	—	—	1634

<i>Age.</i>	<i>Intermediate Group.</i>	LEAVERS.					<i>Grand Total.</i>
		8	12	13	14	<i>Other Ages.</i> <i>Total.</i>	
Boys	—	—	725	—	—	725	1536
Girls	—	—	663	—	—	663	1506
Totals	—	—	1388	—	—	1388	3042

(B) GROUPS OTHER THAN CODE.

(1)	<i>Intermediate Group (other than 8 years). (2)</i>	<i>Special Cases. (3)</i>	<i>Re-examinations (i.e., number of children. re-examined). (4)</i>
Boys	—	1635	—
Girls	—	1916	—
Totals		3551	

(C) Total No. of Individual Children inspected by the Medical Officer, whether as Routine or Special Cases (no child being counted more than once in one year) 6593

TABLE II.—RETURN OF DEFECTS FOUND IN THE COURSE
OF MEDICAL INSPECTION IN 1920.

DEFECT OR DISEASE.	CODE GROUPS.		SPECIALS.	
	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.
(1)	(2)	(3)	(4)	(5)
<i>Skin :</i>				
Malnutrition	14	—	1	—
Uncleanliness	—	—	—	—
Head	264	—	5	—
Body	262	—	1	—
Ringworm :				
Head	4	—	1	—
Body	2	—	1	—
Scabies	3	—	1	—
Impetigo	63	—	10	—
Other Disease	39	—	5	—
<i>Eye :</i>				
Defective Vision and Squint	463	—	37	—
External Eye Disease	51	—	6	—
<i>Ear :</i>				
Defective Hearing	40	—	2	—
Ear Disease	36	—	6	—
<i>Nose and Throat :</i>				
Enlarged Tonsils	172	—	3	—
Adenoids	60	—	5	—
Enlarged Tonsils and Adenoids ...	—	—	—	—
Defective Speech	2	—	4	—

N.B.—It will be observed that the headings “Clothing” and “Footgear” have been omitted. A short reference should be made to these in the body of the report. As regards “Teeth,” particulars should be given in the statements of the working of schemes of dental inspection and treatment where a scheme is in operation.

No. of Individual Children having defects which required
treatment or to be kept under observation .. } 1771

[TABLE II.—Continued.]

RETURN OF DEFECTS FOUND IN THE COURSE
OF MEDICAL INSPECTION IN 1920.

DEFECT OR DISEASE.	CODE GROUPS.		SPECIALS.	
	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.
(1)	(2)	(3)	(4)	(5)
<i>Heart and Circulation :</i>				
Heart Disease :				
Organic	15	—	1	—
Functional	—	—	—	—
Anæmia	57	—	1	—
<i>Lungs :</i>				
Pulmonary Tuberculosis :				
Definite	7	—	6	—
Suspected	2	—	—	—
Chronic Bronchitis	22	—	—	—
Other Disease	—	—	—	—
<i>Nervous System :</i>				
Epilepsy	1	—	—	—
Chorea	—	—	—	—
Other Disease	—	—	—	—
Non-pulmonary Tuberculosis :				
Glands	77	—	7	—
Bones and Joints	—	—	—	—
Other Forms	—	—	—	—
Rickets	2	—	—	—
Deformities	6	—	4	—
Other Defects or Diseases	—	—	—	—

N.B.—It will be observed that the headings “Clothing” and “Footgear” have been omitted. A short reference should be made to these in the body of the report. As regards “Teeth,” particulars should be given in the statements of the working of schemes of dental inspection and treatment where a scheme is in operation.

AREA.....

TABLE III. NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA IN 1920.

			Boys.	Girls.	Total.
Blind (including partially blind)		Attending Public Elementary Schools	—	—	—
		Attending Certified Schools for the Blind.....	2	—	2
		Not at School			
Deaf and Dumb (including partailly deaf).		Attending Public Elementary Schools	—	2	2
		Attending Certified Schools for the Deaf	7	5	12
		Not at School	1	—	1
Mentally Deficient.	Feeble Minded.	Attending Public Elementary Schools	6	2	8
		Attending Certified Schools for Mentally Defective Children	1	—	1
		Notified to the Local (Control) Authority during the year			
	Imbeciles.	Not at School	—	—	—
		At School	—	—	—
	Idiots.	Not at School	—	—	—
Epileptics.		Attending Public Elementary Schools	1	4	5
		Attending Certified Schools for Epileptics.....	—	—	—
		Not at School	—	2	2
Physically Defective.	Pulmonary Tuberculosis.	Attending Public Elementary Schools	5	—	5
		Attending Certified Schools for Physically Defective Children	5	—	5
		Not at School	4	5	9
	Other forms of Tuberculosis.	Attending Public Elementary Schools	—	—	—
		Attending Certified Schools for Physically Defective Children	—	—	—
		Not at School	—	—	—
	Cripples, others than Tubercular.	Attending Public Elementary Schools.	8	1	9
		Attending Certified Schools for Physically Defective Children	—	—	—
		Not at School	5	2	7
Dull or Backwards*		Retarded 2 years			
		Retarded 3 years	29	28	57

* Judged according to age and standard.

TABLE IV.—TREATMENT OF DEFECTS OF CHILDREN DURING 1920.

Condition.	No. of defects found for which Treatment was considered necessary.			No. of defects for which no report is available.	No. of defects treated.	Results of Treatment.			No. of defects not treated.	Per-centage of defects treated.
	From pre-vious year	*New	Total.			Remedied	Improved	Unch'gd.		
Clothing ..		53			53			23	23	
Footwear ..		46			43			3		
Cleanliness of Head ..		1663		542	1663	1121			542	
Cleanliness of Body ..		325		115	185	185		25		
Nutrition ..		14		14						
Nose and Throat ..		397		190	207	207				
External Eye Disease ..		435			431		431		4	
Ear Disease ..		293			291				2	
Heart and Circulation ..		79		17	62					
Lungs ..		26		26						
Nervous System ..		2		2						
Skin ..		1222		171	1051					
Rickets ..		2		2						
Deformities ..		7		7						
Tuberculosis (non-pulmonary).		72								
Speech ..		2		2						
Mental condition ..										
Vision and Squint ..		543			298				245	
Hearing..		40		15	25					
Miscellaneous ..		1303			1179	1179			124	
Total ..		6268		1103	5488	2735	464	48	940	

* The return should show comprehensively all defects found during the year, from whatever source derived, which required treatment.

AREA.—WIGAN COUNTY BOROUGH.

TABLE V.—INSPECTION, TREATMENT, &c., OF CHILDREN
DURING 1920.

total number of children Medically Inspected (whether Code Group, special or ailing child)		3,042
(2)	The number of children in (1) Suffering from Defects (other than uncleanliness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment	—
(3)	The number of children in (1) who were Referred for Treatment (excluding uncleanliness, defective clothing, etc.) 1,239	} 1771
	The number of children referred for treatment for uncleanliness, etc. 532	
Total number of children treated at the Clinic (referred from Routine Medical Inspection, Special or ailing child) ..		6,593
(4)	The number of children in (3) who Received Treatment for one or more defects (excluding uncleanliness, defective clothing, etc.)	957

REPORT OF THE SCHOOL DENTIST.

At the beginning of the year the Committee made arrangements for the inspection and treatment of the teeth in children in attendance at the Elementary Schools of the Borough.

Of all the pressing needs of the rising generation, that of the care of the teeth is most urgent. The foul and decaying teeth are a nidus or hiding place for numerous germs of all sorts.

I should like to introduce in this report a note of warning to parents of the grave results that may follow the neglect of the teeth of the child. It is only of late years that people begin to realise what an important part of the human body the mouth really is.

Because in the course of my efforts to take care of the children's teeth as School Dentist, I have been, and still am, hampered by opposition and indifference on the part of some parents who, failing to grasp the great need for, and the good derived from, dental attention, most foolishly and unreasonably fail to give their consent to the children's mouth being treated at the School Dental Clinics; with the result that these helpless little ones are condemned to continue with bad teeth and diseased mouths.

A parent who wilfully neglects the teeth of children when help is so readily available has much to answer for. There are still, alas, numbers of fond parents who do not seem to grasp the importance of their children's teeth. These mothers have my sympathy, and I have every hope that as soon as they learn the great need of dental advice for their babies they will follow in the footsteps of all up-to-date mothers and take advantage to the full the present day facilities in treatment.

No mother could possibly wish to lose any chance of giving her child a good start in life. What can be of more value than good health? Good health depends largely on care of the mouth from babyhood. A child's health can only be as good as its teeth.

Do mothers as a rule know the results of neglect of the mouth in childhood?

Some common ills that may follow such neglect are skin diseases, poor-ness of the blood, bad breath, bad complexion, sore throat, indigestion, rheumatics, diseases of the lungs, kidneys, and bowels, general ill-health and life-long suffering.

You mothers can save your children from such evils.

When all the first teeth are cut (about 2 years of age) bring your baby to be seen by a Dentist, and have its mouth examined. Do not stop at this, but bring the little one at frequent intervals and see that any treatment required is carried out. Do not wait until the teeth are bad or till they hurt and are sore, that the slightest touch is painful.

If such is the case, treatment is sure to hurt more or less, and the child will get to dislike and dread a visit to the dentist, whose wish is to prevent pain and suffering.

By such care and attention you will save yourselves from much anxiety about your children, and many a sleepless night. You will be laying the foundation for their good health and future welfare, and you will have the pride in seeing them grow up vigorous, sturdy, and well nourished

Is not such great good worth so small an effort?

There is no department of public health which renders so large a return for money expended as the system of treating children's teeth in School Clinics.

I cannot close my report without offering my appreciation to the Nurses and teachers for their invaluable assistance, and to Doctor Wynne and Mr. Mockler, without whom the work could not have been so well carried out.

STATEMENT OF TREATMENT.

<i>Number of Children Treated.</i>	<i>Temporary Extractions.</i>	<i>Fillings.</i>	<i>Permanent Extractions.</i>	<i>Fillings.</i>	<i>Scalings.</i>	<i>Dressings.</i>
466	675	272	7	14	3	11

SCHOOL INSPECTIONS.

<i>Schools.</i>	<i>Examined.</i>	<i>Defective.</i>	<i>Clean.</i>	<i>Absent.</i>
St. John's R.C.	591	411	180	93
St. Catharine's				
Presbyterian				
St. Patrick's	287	163	124	53
St. Patrick's				
Worsley Mesnes				
Goose Green	879	463	416	85
Pemberton Colliery				
St. John's C.E.				
Scot Lane Council				
St. George's	879	474	405	84
Beech Hill Council				
Sacred Heart				
St. Andrew's				
Calyton Street				
St. Joseph's	826	511	351	108
Poolstock				
Whelley				
Caroline Street				
Warrington Lane C.				
St. Mark's				
St. Michael's	244	147	97	48
St. Mary's				
National	3742	2169	1573	471

